

GREEN INTERIORS

Beyond fads and greenwash

By Jenny Brown

Most of the attention paid to sustainable houses these days is on the external envelope: “bricks and mortar”, cladding, roofs, footings, and how it all comes together.

Most green home builders and renovators roughly understand the principals of passive solar, cross-ventilation, insulation, rainwater and greywater harvesting. They are aware of the pay-offs to the environment and their hip pocket. As the pundits say, “it’s not rocket science”.

But when it comes to fitting out interiors, the knowledge base is murkier. This is despite interiors being fraught with environmental hazards. So many surfaces, appliances, furnishings, fittings and fixtures coalesce to make up a house interior that it’s not uncommon for a house with great passive design being let down with a poorly thought-through fitout.

This is not as it should be. Interior design is where ecologically responsible building gets really personal.

TOXIC INTERIORS

It’s been common knowledge for over a decade that sick buildings can have a detrimental impact on human health and psychology. Escalating levels of childhood asthma are being linked with high levels of toxic vapours that

“off-gas” from walls, carpets, cabinetry and the hundreds of other household items – most especially when they are new or wet – but in some cases long after their installation.

“Have you ever really smelled a plastic shower curtain?” asks Robyn Galloway. The Melbourne-based designer and founder of ESO, the Environmentally Sustainable Objects Group says there are so many VOCs (volatile organic compounds) in modern consumer goods that in enclosed spaces their potentially toxic gases can recombine in ways that haven’t yet been calculated. Some VOCs are natural. Others, end products of petrochemical chains, are manifestly unnatural.

“Some buildings,” says Ms Galloway, “take 10 years to stop off-gassing because VOCs are contained in formaldehyde, glues, standard particle boards, solvents, paints, timber sealants, vinyls, plastics, in household cleaners...in almost anything you can name. Without question we’ve been living in toxic environments.”

“VOCs,” says head of interior architecture at the University of New South Wales, Dr Kirsty Mate, “are not as dangerous as asbestos but they are listed by the World Health Organisation as human carcinogens”.

VOCs, most notoriously present in some compressed timber fibre boards (aka particle

boards), are just one of the known hazards pushing responsible sectors of the furniture and interiors industries to rapidly redress their manufacturing processes.

“There has also been quite a drive from the general public. The industry is trying to improve its product because it is, after all, connected to its bottom line. Newer particle boards, for instance, have a lower level of VOCs and some have a zero formaldehyde content.”

Though informed designers and manufacturers have been onto greener options since the early 1990s, Kirsty Mate says the revolution currently sweeping through her industry is becoming so entrenched and exciting “that it is one of the most innovative, creative and progressive things happening anywhere”.

We’re a long way from when Dr Mate was told by colleagues that “it’s just a fad”.

Environmentally-conscious interior design and architecture is also “starting to lose that dowdy image”. There are countless brilliant innovations and ideas being adopted and adapted right across the world. One of her favourites is cardboard kitchen shelving: “It could replace particle board, could last for a few years and it can be recycled”.



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Queensland-based interior designers Mannigan Edwards International specialise in eco-friendly interiors. Their design of a display apartment in Southport Central on the Gold Coast includes a GECA certified sofa made by Jardan, upholstered in 100% flax. The curtains in the living room (above) are 100% linen, and in the bedroom (right) are 100% hemp. The bedroom also includes a bed head made from 100% recycled timber, organic cotton sheets and a cotton, wool and coir mattress. Photos: Mannigan Edwards International.





If you like the sound of Kirsty Mate's idea for cardboard kitchen shelving, you may want to investigate the Freefold series (www.freefoldfurniture.com). Made from 97% post-consumer wastepaper cardboard, the flat-pack system can be assembled into kitchen shelves, then disassembled and reassembled as your needs change, or recycled. RRP \$88 per module (the freestanding unit pictured is 11 modules). Photo Toby Horrocks.

PLANNED OBSOLESCENCE

Kitchens and bathrooms are the most often renovated interior spaces in a house, and according to sustainable designer Tone Wheeler: "If we have this obsolescence, why don't we plan for it?"

"Why are the services chiselled into the structure and the fit-outs made so hard to remove, even though they fall apart? While a building's structure can be long lasting, and built to be so, the parts that we can expect to have a limited lifespan would suggest the opposite approach. Hence 'loose fit' as a green strategy."

www.vironastudio.com.au

At the same time, people are rediscovering the charms of older fittings. Flooring linoleum is coming back in a big way. Not before time, says Kirsty Mate: "A beautiful material that is based on linseed oil and other natural products, and that will decompose". Natural rubber flooring is a new take on synthetic rubber flooring that is also becoming popular.

But before we get carried away with the bevy of green products that are coming to the market, experts caution against greenwashing. Many companies are making environmental claims for products that don't stand up to scrutiny.

Know your product

In the gargantuan sector that is the interior and homewares industry, there are, thankfully, ways to sort the good from the misnamed.

Currently the most comprehensive and credible Australian gateway to sourcing tried and tested environmental household and building product is GECA, or Green Environmental Choice Australia (www.geca.org.au).

Marketing manager Nick Capobianco says "it is Australia's only third-party certification

body for building and consumer product. It has 45 different standards covering everything from nappies to furniture, paints and cleaning services.

"It's an eco-label that defines what is environmentally preferable, is a lifecycle based standard and it assesses that a product has less environmental impact than a regular product.

"It is not a greenwashing term. Not every company that applies to us for evaluation earns a GECA label."

"Greenwashing is a big problem," adds Capobianco, and he tells how a recent Canadian study of 4000 so-called ecologically-responsible products found that in 98 per cent of cases the claimant companies "ran the risk of mislabelling".

The paint industry is hurriedly adding enviro product in response to consumer demand, but Susanne-Louise Engelhard, a Sydney based colour and paint consultant, says all but natural paints – which use clay and earth minerals – use some petrochemical content.

Painted and varnished surfaces are one of the most expansive "skins" in a house and

therefore potential VOC off-gassing elements in any home. Natural paints, which can also make claims for the manufacture and disposal aspects of their production, can cost 10 to 15 per cent more. "But," says Susanne-Louise Engelhard, "they look fantastic.

"They're all matt or flat paints but they are breathable, not plastic. They feel beautiful. Different. They say that using clay paints is like giving your wall a facial."

As it moves on and into our domestic sphere, green interior design will not necessarily gain a trend logo because it will become such a "holistic movement," says Kirsty Mate.

For all of the art and invention of eco interior design, especially of the "salvage" school that is coming forward with such witty reuse applications, Dr Mate believes that the green interiors movement won't develop an overtly identifiable style or look.

"It will not have a style or a look, it will just become something that is normal."



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HOW GREEN IS YOUR PAINT?

If a paint says it is “low-odour” or “low-VOC” it means it must be environmentally friendly, right? Wrong! There’s a lot more to selecting sustainable paint products than meets the eye.

Conventional paint manufacture uses petro-chemicals to produce what are essentially plastic coatings. This “plastic” remains in a liquid form until it is applied to a surface, where the solvent or “carrier” begins to evaporate into the atmosphere releasing volatile organic compounds (VOCs). VOCs can react photochemically with sunlight to produce smog.

Low VOC paints are certainly an improvement on the smelly, toxic products that are still being used on many houses. But real sustainability is about a lot more than just VOCs. The entire manufacturing process and its long-term impact on the environment should be assessed.

In addition, products could also be manufactured specifically to help combat climate change.

When choosing sustainable paint products, some criteria that need to be taken into consideration include:

- Durability: Does the product perform well enough to provide reasonable durability? Products that don’t last just aren’t sustainable, because they require more frequent re-coating, consuming more resources.
- Packaging: Is the packaging easily recycled?
- Compliance to environmental regulations: GECA provides certification for paints under its Architectural and Protective Coatings Standard. This standard is just as important to choosing paints as FSC-accreditation is to timber.
- Ingredients: Are the ingredients sourced from highly abundant or renewable resources? These might include clay, plant oils or mineral silicates. Or they might include waste materials. There are new products available on the Australian market that are manufactured using collagen extracted from waste egg shells (www.doworld.com.au), and using emulsified, recycled, waste industrial oil (www.ecolour.com.au).
- Independent Evaluation: Have the manufacturer’s environmental claims been independently evaluated by a third party? Preferably an internationally recognised eco-label like Good Environmental Choice Australia.
- Carbon Offsetting: If it is an exterior paint, does it reflect solar radiation to increase building energy efficiency? Nano-ceramic paint technology can offset 18 tonnes of carbon for the average Australian house, and cut cooling costs by 40 per cent. Look for products that meet Section J of the Building Code (BCA) for Energy Efficiency.

By actively choosing products that meet at least some of these criteria, you can make a real difference to the environmental impact of the painting industry, and even help combat climate change.

This is an extract of an article by Daniel Wurm, GreenPainters Managing Director. GreenPainters is the national sustainability initiative for painting contractors. It is a non-profit program providing accredited training, advice and skills.

www.greenpainters.com.au



RESOURCES

GECA: Good Environmental Choice Australia

A wide-spectrum eco-label and free online information resource base that has been growing since 2001 as an initiative of the Australian Green Procurement Network.

www.geca.org.au

ecospecifier

An online subscription-based database of ecologically responsible and health-preferable products. By 2009 it had 3500 eco-products listed in 80 different industry categories.

www.ecospecifier.org

GreenPainters

A comprehensive website on the good and bad of the Australia paint industry, with information about paint products and contacts for green painters.

www.greenpainters.com.au

ECO-Buy

A Victorian government initiative with a comprehensive website aimed at linking purchasers and suppliers of green products.

www.ecobuy.com.au

Sustainable interior designers

- Smith Design Studio (Sydney based)
www.smithdesignstudio.com.au
- Mannigan Edwards International (MEI; Gold Coast based)
www.manniganedwards.com
- Kis Designs (Melbourne based)
www.kis-designs.com
- Eco-Librium Interior Design (Perth based)
www.ecolibriuminteriordesign.com.au

GREEN INTERIORS – WHAT TO LOOK FOR

- For longer-lasting applications look for materials and furniture with real durability
- For limited-lifespan areas look for fittings that can be easily removed and replaced
- For “future proofing” look for furniture that can be moved to different settings
- To give it a new lease on life, reupholster older furniture
- Look for recycled furniture and timbers
- Look for GECA accredited low or no-VOC paints and surface finishes
- FSC-accredited timbers

Smith Design Studio, based in Sydney, specialise in environmentally sustainable design. This room features Forbo linoleum produced from renewable materials such as linseed oil, jute and ecologically responsible pigments, and a sofa from Mamagreen made from reclaimed timber from old railways and warehouses.
Photo: Smith Design Studio.