

MODERN GREEN HOMES Sanctuary

INSIDE ISSUE 28 130+ green products & design tips; Sustainable House Day preview;
Design workshop at the beach; House Energy Ratings; Green paving options

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BIG IDEAS



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Building with bamboo
Choosing your green builder
Sustainable House Day preview

WIN

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Offer open to Australian residents only.

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Sustainable House Day 2014

We take a sneak peek inside some of Australia's most environmentally friendly homes open for Sustainable House Day.

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Sustainable building design as the norm may still be some way off, but there are signs it could be filtering into the mainstream. There is a growing array of local and international accolades for those at the forefront, and cities such as Vancouver are taking the cause to new heights with strict guidelines on the ecological sensitivity of new buildings. Meanwhile sustainable architecture had its place in the sun during the Australian Institute of Architect Awards this year. Breathe Architecture took home gongs in both multiple housing and sustainable architecture for The Commons in Melbourne, and you can read about Troppo's winning Top End design on p14.

However, trending in the consumer age can have its drawbacks. Increasing demand for green products has seen a matching rise in greenwash, with companies making bold claims about their environmental credentials whether or not they reflect their operations. As Sara McMillan tells us in Labour of Love (p 58), ensuring the legitimacy of eco-products is one of the biggest challenges of an environmentally responsible build.

Sara's project also demonstrates the need to think big in small spaces, a theme carried throughout this issue. Simon Anderson's Bridge House (p46) and C4 Architects' SupaShak (p30) highlight the benefits of a restrained footprint. In Perth, Gerard Siero and Patrick Irwin help second-time green home builders Emma and Kim buck the trend for overbuilding in our western capital (p40).

I am delighted to bring you this issue of *Sanctuary* as its new editor. *Sanctuary* is an independent champion of Australian sustainable design, and its publisher, the Alternative Technology Association has tirelessly advocated for and empowered sustainable living since 1980. We welcome the rise of green design, and eagerly await the 'alternative' becoming unnecessary. After all, what use is sustainability if it's limited to those in the know?

I look forward to continuing to showcase the best in modern green homes and connecting you with the ideas and people that can help you realise your own sustainable project. And as always we welcome your questions and suggestions.

Happy reading,

Emily

sanctuary@ata.org.au | sanctuarymagazine.org.au

Congratulations to Wolfgang Schmidt, winner of the Tindo Solar 1.5 kW Solar System subscriber prize. For your chance to win a Gazelle e-Bike from Velo Electric & Folding, make sure your subscription is current by October 31, 2014.



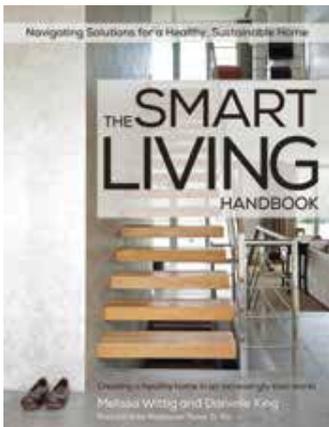
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Reviews

—Books, apps, websites and other interesting stuff

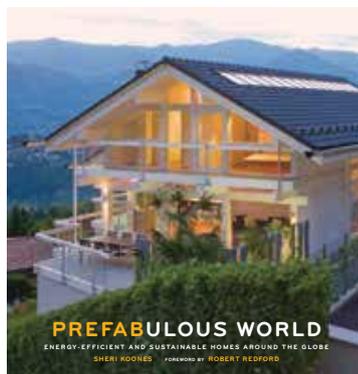
If you have recommendations for books, smart phone apps, blogs, websites or anything else you think would be of interest we'd love to hear from you. Email us at sanctuary@ata.org.au

BOOKS



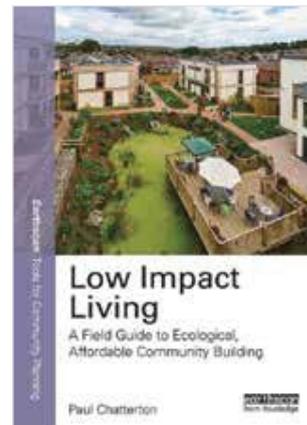
THE SMART LIVING HANDBOOK
Melissa Wittig and Danielle King
Green Moves Australia, 2014
\$34.95

While we talk a lot about sustainable homes, not a lot is said about the importance of healthy homes. This book shows how to create a home that is functional, energy efficient and supports good health too. In particular it provides strategies to create and maintain a non-toxic indoor air environment to reduce health issues in families.



PREFABULOUS WORLD: ENERGY-EFFICIENT AND SUSTAINABLE HOMES AROUND THE WORLD
Thames and Hudson, 2014
\$45

Prefabrication of homes is increasing around the world as an energy and resource efficient building method and this book shows some of the leading examples from Auckland, Copenhagen, Tokyo, Toronto, Los Angeles and elsewhere. The book highlights the sustainable design and energy-saving elements of each home, and shows floor plans, multiple images of the exterior and interior and an extensive resource section that lists the architects, builders, designers and suppliers that worked on each home.



LOW IMPACT LIVING: A FIELD GUIDE TO ECOLOGICAL, AFFORDABLE COMMUNITY BUILDING
Routledge, 2015
\$39.95. Available Aug 21 or via pre-order

This book follows the journey of the LILAC housing pioneers in Leeds, UK, a group that built an ecological, affordable cohousing neighbourhood. Written by the co-founder of LILAC, the book shows how the group came together then conceived, negotiated, designed, financed and built their cohousing dream. It's bound to inspire readers to become involved in building and running their own neighbourhood.

Riad dreaming

Outside and inside blur in this elevated home in the Top End which nods to Marrakesh and Bali for authentic (and low-energy) tropical living.

WORDS Verity Campbell
PHOTOGRAPHY Fiona Morrison



Green in between



◀ Winter warmth is stored in the recycled red brick wall, which separates Fiona and Bill's bedroom from the garden, and internally in the Husqvarna concrete floor.



◀ The sandy-hued, rendered frontage doesn't seek to turn heads, resting comfortably amid the inner-suburban mix of period style and inter-war housing.







Sustainable House Day



Sanctuary previews just some of the houses open as part of Sustainable House Day this September.

TAKE A SNEAK PEEK INSIDE SOME OF AUSTRALIA'S most environmentally friendly houses this September as part of Sustainable House Day. This is a chance to glean some of the hard-won dos and don'ts for your green building project, and see first-hand the results from those that have made it out the other side.

Homes are open across Australia, with homeowners on hand to offer advice on replicating the sustainable features of their properties. This year features a new straw bale dwelling at an eco village outside Adelaide, an 8.5 Star infill development in Geelong, a Gold Coast Hinterland home with native gardens and even architect Caroline Pidcock's Sydney terrace, deep in the midst of renovation.

Sustainable House Day was first held in 2001 and is now managed under EnviroEvents of EnviroShop. It's grown to be a calendar favourite for the environmentally-savvy with recent events seeing 200 homes open their doors to over 40,000 people, signalling the growing interest in sustainable living in Australia.

Sustainable House Day gives anyone from industry professional to curious novice an insight into just how much can be gained from going green.

Sustainable House Day takes place on Sunday September 7 and Sunday September 14. www.sustainablehouseday.com



Design workshop: A home with a view



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The Friedmans, clockwise from left: Emma, Luca, Kim and Jess.

Emma and Kim Friedman have built a sustainable house in their hometown of North Beach Perth, once before, but were met with strong “resistance to anything against the norm”. They are now trying again with renewed enthusiasm and commitment, this time on their neighbouring block. Architects Gerard Siero and Patrick Irwin offer an alternative perspective.

A CENTURY OR SO BACK NORTH BEACH was a distant stretch of dunes and surf, and when the Friedmans first moved there in 1997, the surf-shack aesthetic could still be found. Soon after they moved to New Caledonia, from where they managed their first North Beach build (the home in which they still live). Emma and Kim sought to break the mould and build sustainably, but their efforts were limited by a clear resistance to this approach. In one instance, they were advised that air-conditioning would need to be installed to make any resale possible.

Despite this experience they have retained their excitement for the design process and the challenge to build more sustainably. They are also partly motivated by an instinct to preserve the area they live in. “We don’t want somebody else to

build an ugly concrete monstrosity next to our current house,” Emma says. “We want to complement the local architecture and build sympathetically to the atmosphere in North Beach.”

Emma and Kim are seeking a sustainable home for them, their two daughters, Jess (14) and Luca (7), their dog and possibly some chickens, with a mixed palette of materials. The suburban site in North Beach is close enough to smell the ocean and only 80 metres from Star Swamp Bushland Reserve, where the family enjoys walking and cycling.

They want the house to be functional, but comfortable with stimulating connections to the outdoors; to work with the climate and seasons, and the garden to be relevant throughout the year, with deciduous trees for shading, natives, fruit

trees and a veggie patch. They would like the house sections to be integrated, but have independence from one another.

Kim’s parents stay with the family for a month each year, so a good sized spare bedroom is also required.

The site is 12.6 metres wide and 35.8 metres deep, with the back of the property facing north.

The Friedmans hope to make use of some Kwila Solomon Islands hardwood, which they sourced from a dead tree when they lived in the region before moving to Perth.

They also sought advice on increasing natural light without compromising indoor temperatures, and about the feasibility of geothermal heating and cooling.



A modern two-story house with a large wooden slat terrace and a dining table on a wooden deck. The house features a prominent wooden slat facade and a large glass window. The terrace is covered by a dark metal frame with a wooden slat roof. A dining table with six chairs is set on a wooden deck. The interior of the house is visible through the glass window, showing a dining area with a table and chairs, and a living area with a sofa. The sky is clear blue.

Adaptable Terrace

WORDS Emily Braham
PHOTOGRAPHY Emma Cross



ATA update

—Alternative Technology Association: www.ata.org.au

The ATA, publisher of *Sanctuary* magazine, is a not-for-profit organisation working to ensure its members and the wider community have access to the resources and practical information they need to green their homes and lifestyles. Stay up to date with ATA news. Subscribe to the ATA e-newsletter online at www.ata.org.au



ATA NEWS



NEW SOLAR CALCULATOR

The ATA's free Sunulator tool helps communities assess the economic feasibility of grid-connected solar power systems. "There's a real upswing in interest in community energy at the moment," says lead designer Andrew Reddaway. "A community group might be looking at putting a substantial number of solar panels on the roof of a local warehouse or factory. Sunulator will help them work out whether their project will be economically viable."

www.ata.org.au/ata-research/sunulator



SOLAR TRAINING IN EAST TIMOR

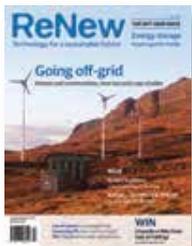
ATA's Michael O'Connell recently returned from East Timor where he conducted training of solar installers and helped establish a maintenance help desk with project partners Mercy Corps and CNEFP. Michael also oversaw the installation of a solar power system on the roof of a school at Remexio in the Aileu District which was donated by the Kangaroo Valley Remexio Partnership and helped local teams prepare for several other solar installations.



COMMUNITY ENERGY

The ATA is part of the Coalition for Community Energy (C4CE) that is working to promote and grow community energy projects in Australia. One of C4CE's first events was the Community Energy Congress that attracted over 300 people from across Australia. "Judging by the amazing spirit at the event, there is enormous momentum for Australian communities and individuals to take control of their energy future," says ATA CEO Donna Luckman.

ATA SHOP



RENEW 128

ReNew: Technology for a Sustainable Future has been published by the ATA for over 30 years. The current issue is an off-grid special showing households and communities how to have an independent energy and water supply.

Price: \$8.95 for print version or PDF.

shop.ata.org.au/shop/renew-issue-128



LED STRIP LIGHT

These 30cm-long LED strip lights are very energy efficient and can be connected together to various lengths. They are great in caravans, boats or to illuminate task areas at home.

Price: \$28

shop.ata.org.au/shop/led-strip-light



ECOSWITCH

Standby power accounts for 5 to 10 per cent of all energy. By placing the EcoSwitch in a convenient location you can control power to a device or group of devices, such as your entertainment system, without having to climb under desks or behind cabinets.

Price: \$19.95

shop.ata.org.au/shop/ecoswitch



Products



01 GOOD OLD BAKERS OVEN

This oven harks back to another era when the stove heats the home, bakes your bread and even warms your bath water.

Once the fire is going in the top section of the Nectre Baker's Oven the heat can be redirected to the oven in the lower section to bake a cake or cook a roast. The cooktop takes four large saucepans or pots, or even a wok. Meanwhile, with an 11 kilowatt output it can heat an area up to 90 square metres, spreading cosy warmth through your kitchen and living areas.

To get the most out of the oven a boiler can be fitted to supplement your existing hot water system.

www.nectre.com/?page=baker-s-oven

02 FREEFOLD STOOL

These fun stools made by Fold Theory are incredibly strong considering they are made from recycled cardboard. Created by architect Tobias Horrocks, their strength comes from the double corrugation and multiple folds within the design.

Fold Theory's furniture can be returned to flatpack and reused. The cardboard is made from post-consumer waste paper and sustainably managed plantation wood, so is also recyclable at the end of its useful life. It takes around two minutes to assemble from just three pieces of cardboard, and looks great alone or when fitted together to make longer bench seats.

www.foldtheory.com/portfolio/freefold-stool/



03 CARTONADO

Cardboard construction doesn't stop with the stool featured above. The Cartonado suspension lamp by Portuguese design studio Vicara arrives flat in a cardboard box, then fans into a 3D shape.

As well as being an economical material, the brown cardboard gives the light a warm colour. With so many household items going straight to landfill when broken, this light fitting can at least be recycled at the end of its useful life. The Cartonado can be cut to a variety of different shapes, and comes as a table lamp too.

www.vicara.org/CARTONADO-SUSP-Store

