

**Fairview
Sustainability eBook 2020**

The 2020 Sustainability Digital Awards Gala

For the past 14 years, Architecture & Design magazine has run the Sustainability Awards – Australia’s oldest national sustainability awards program dedicated to rewarding excellence in sustainability across our built environment.

Along with that, we have also organised the Sustainability Summit, a full-day, CPD-point earning educational event that has now become one of the most sought-after annual CPD programs in the industry.

So while this year’s Awards and Summit programs did have their challenges due to the issues we are all experiencing in 2020, the fact remains, that for the first time ever, we managed to provide a digital-only event that was both amazing and highly-popular and one that was also unparalleled anywhere in the country.

On that point, for next year, the planning process has already started and what I can tell you, that as an organisation, once again, we will be forging ahead with an industry-leading

and best-in-class industry event.

So on that note, I’d like to personally thank you for your involvement and interest in our Sustainability Awards program, one that will always be dedicated to promoting sustainability and environmental consciousness in all its forms across Australia’s diverse and vibrant built industry.

BRANKO MILETIC
EDITOR, ARCHITECTURE & DESIGN

The Awards Ambassadors



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SUSTAINABILITY & ENGAGEMENT
MANAGER, SEKISUI HOUSE AUST.



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Q&A with Ashley How

Following the 2014 Lacrosse cladding fire, a shockwave was felt throughout the Australian cladding industry. With potentially millions of square metres of cladding needing replacement, Fairview is figuring out how to sustainably process the waste to avoid it from ending up in landfill.

We caught up with Ashley How, Technical Manager at Fairview.

A&D: Hi Ash, tell us about yourself, your experience and your current role at Fairview.

AH: I am the Technical Manager here at Fairview, which involves heading up our Product Management and Research & Development teams, and also touches on industry engagement as well. As a company we pride ourselves on our technical knowledge and we have a strong focus on compliance and quality as a result of that.

I've been here for eight years, and in that time I've worked in both the Operations and Sales domains, so I've had plenty of market experience and plenty of physical product experience that inform my approach to the role I'm currently in.

A&D: Why is sustainability important to Fairview?

AH: Being successful in business is about more than just making money. We have a social responsibility to make a better world. Facades and construction are a part of that, so we do our best to promote sustainability wherever we can.

A&D: And what is the situation in the broader cladding industry?

AH: I think it's fair to say that in the cladding industry there is currently a bit of a disconnect between sustainability and fire safety. What

I mean is that the products that rate the best in terms of thermal performance and non-combustibility tend to have less sustainable practices involved in their manufacture. But particularly when you consider the high-profile cladding fires that have happened in the last few years, fire safety just has to take priority.

A&D: In a way, the cladding fires were a catalyst for Fairview's journey towards more sustainable practices. Tell us about that.

AH: In 2014, the Lacrosse building fire in Melbourne shone a spotlight onto the use of combustible cladding on Australian buildings. The figures differ, but our guess is that there are 4,000-5,000 buildings in Australia that may have combustible cladding - amounting to somewhere in the region of 4 million square metres of cladding - and it all needs to be removed from buildings and replaced. All of this cladding is aluminium composite panel which is essentially a sheet of polyethylene (the flammable part), sandwiched between two pieces of aluminium.

We realised that there is no recycling process for this cladding; it's all destined for landfill. That was where we saw an opportunity to really make a mark in cladding sustainability - by developing sustainable end of life processing. So we invested a lot of time and effort into developing Ecoloop, which is an industry and Australian first, to find ways to 100% sustainably process these panels as they come off buildings, and to find new uses for the components of the panels.

A&D: In terms of uptake, what are your hopes around the difference this could make to the industry?

AH: We believe this can make a significant difference to standard industry practice, focusing on cladding initially, but we believe the Ecoloop process can be extended into a range of other sustainable applications. Our aim is to continue refining the process and educating building owners and builders about it. We hope to make the process as cost effective as possible, and even comparable to the main alternative - which is landfill. Ultimately we want to change behaviours and make it a no-brainer for people to choose EcoLoop.

A&D: The combustible panels that you aim to recycle were not made by Fairview, so in essence are you finding ways to clean up other people's mess?

AH: It's not our product, but it's our industry. We strongly believe all cladding businesses including ours will benefit from a better industry, and to that end we've spent a lot of time and money in building and sharing knowledge and collaborating wherever we can. So if you look at it that way then really it's our responsibility to get stuck in and provide support to our industry - and the environment - wherever possible.

For more information, [visit Fairview here](#).



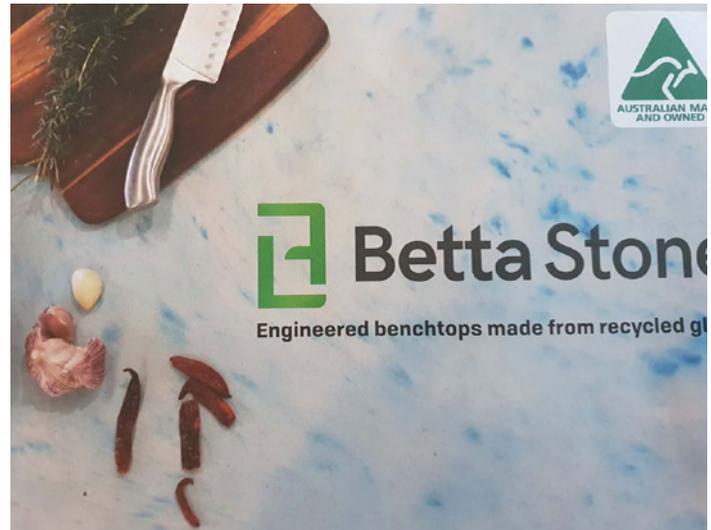
Waste Elimination Award Nominees



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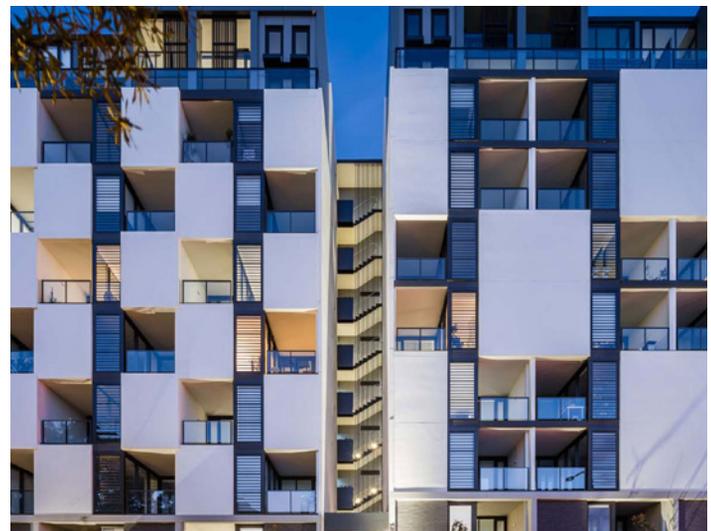
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WINTER ARCHITECTURE



MARRICK & CO
MIRVAC DESIGN AND TONKIN ZULAIKHA GREER

Award Winner

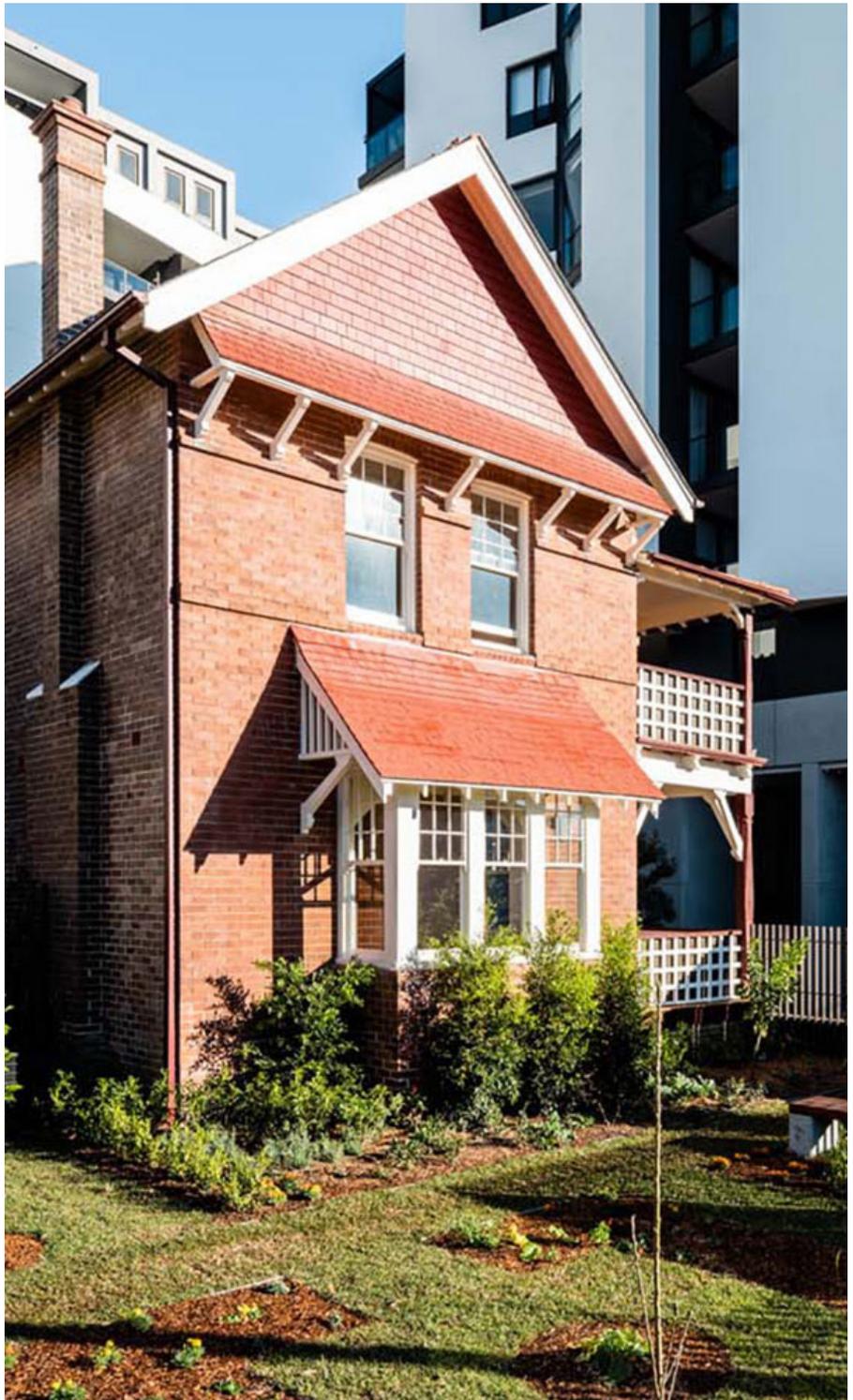
WASTE ELIMINATION

MARRICK & CO BY MIRVAC DESIGN AND TONKIN ZULAIKHA GREER

At Marrick & Co, Mirvac has created the first One Planet Living community in NSW and in doing so has reimagined urban life as more sustainable, liveable and resilient.

A well-resolved ground plane allows two new residential buildings to reside harmoniously alongside adaptive reuse of heritage fabric, public green space and the new Council Library and Pavilion, which were designed by BVN and delivered by Mirvac.

Guided by One Planet Living principles, urban design brings connections and open spaces, creates safe and equitable access to new amenity, improves habitat, promotes wellbeing, mitigates environmental impact, and supports local economy, culture and community. Collaborative consumption is encouraged via a resident-managed tool library, reading library, bulky goods store & kitchen garden. Outdoor spaces provide significant new biodiversity, human comfort, social interaction & stormwater filtration. The Residents' Garden, rooftop kitchen garden, barbecue area & pizza oven allow residents to grow & prepare healthy food.



High pleasure – low Impact

Specialising in architecture for remote and difficult sites demands diverse skills that can ensure minimal environmental damage while also delivering comfort and joy.



Indeed it requires expertise in architecture that can give back to the landscape in a positive and restorative manner. It also requires a mindset that understand hyper-efficiency in product design, building design, manufacturing, construction and smart logistics.

The design, siting and construction of cabins and shacks in natural landscapes is an artform when executed successfully.

The architect and builder Stephen Sainsbury has refined and pioneered the design and repeated deployment of pods and pavilions in numerous locations in Australia and abroad, including Tasmania, Flinders Island and India.

Established in 2005, Stephen's company – EcoShelta – has been at the forefront of architect- designed sustainable buildings that utilise the latest in 'green' materials, technology and assembly systems. Sainsbury notes that his practice aims 'to achieve the highest possible aesthetic return for the lowest achievable ecological impact'.

The EcoShelta method has been developed and progressed over many years of real-world application. Multiple designs for different uses and locations demonstrates the responsiveness

shown by EcoShelta and their various designs. Whether its coastal, hilltop or rural, the range of cabins and pods can accommodate the most demanding of environmental constraints and requirements.

Coherent thinking backed by practical experience also shines through the FAQs on the EcoShelta website where you will find information, guidance and direction, including clear justification for how the company uses 'space-age' aluminium to maximise durability, lightweight and termite-free performance.

Sainsbury and his EcoShelta pods talk to the importance of good design, measurable performance and minimal environmental impact. There is a certain wisdom reflected through his design thinking. He acknowledges the cultural significance and ecological imperative of tackling consumption through the making of buildings that are truly sustainable, as opposed to clichéd eco improvement.

In Sainsbury's own words, his practice aims to achieve the highest possible aesthetic return for the lowest achievable ecological impact.

More information: ecoshelta.com/





ecoloop

FAÇADE SUSTAINABILITY / A FAIRVIEW INITIATIVE

Fairview's EcoLoop - a sustainable end-of- lifecycle process for cladding

Following a number of high-profile cladding fires including the Lacrosse fire in Melbourne and the Grenfell fire in London, the world became very aware of the potential risks of flammable cladding.

In Australia, State Governments responded with investigations, task forces were set up, and the Victorian Government pledged \$600 million to replace existing combustible cladding on numerous buildings with a safer variant.

The vast majority of cladding requiring replacement is large panel aluminium composite cladding. It consists of a core material - generally polyethylene - sandwiched between two pieces of aluminium. While figures vary, as much as 4.2 million square metres of aluminium composite cladding may be pulled off buildings and replaced in the coming years. This translates to 20,000 tonnes of panel which is 340,000 tonnes of greenhouse gases.

For almost thirty years, Fairview has manufactured cladding products and been a leader in the industry. As the cladding crisis unfolded, Fairview realised there was a secondary, environmental crisis that would unfold as a result.

No recycling process existed for aluminium composite cladding. This meant that all the

cladding coming off the buildings would, one way or another, find its way into landfill. Fairview set out to examine the full lifecycle processing of the aluminium composite panels and see what could be done to reuse the material and keep it out of landfill.

The result is EcoLoop. An industry and Australian first process that aims to 100% sustainably process the panels coming off buildings and create new uses for the components of the panels. The crux of the issue is that aluminium composite panels are just that - composite - and the materials need to be processed differently in order to be of further use.

To solve this, EcoLoop employs a complex delamination process which separates the aluminium from the polyethylene so they can each be repurposed into other products. Aluminium can be melted down and remade into other building products (even solid aluminium cladding), while polyethylene is commonly used in industrial piping and

RETHINK RECTIFICATION AND CLADDING WASTE



AUSTRALIA'S FIRST CIRCULAR ACP SOLUTION DIVERTING 100% NON-COMPLIANT ACP FROM LANDFILL

applications like tyre stops in car parks, park benches - there's myriad applications for it.

But bringing an Australian-first process to market is no mean feat. There are significant costs attached, issues with securing the right facilities, and of course raising awareness and changing behaviours so that companies actually use it.

Fairview is raising awareness amongst key corporate clients and corporate building owners that participating in the Ecoloop process will go a long way to meeting their sustainability goals - and those of their investors. But being a purely ethical decision (there is no Government mandate as to how these materials are processed), often it comes down to the bottom line.

Fairview hopes to make the process as cost-effective as the alternative - landfill - to make the decision as easy as possible for building owners, builders, and any other parties that may be involved with the replacement of aluminium composite cladding.

No solutions like this existed previously, so there is also hope that over time Governments will see the value of end-of-lifecycle considerations when it comes to cladding and include the process as a requirement in the construction of any new buildings. Similarly, as the process is expanded it can be applied to more products than just cladding.

Ecoloop was borne from Fairview's desire to provide a recycling solution to combat the negative perception directed toward non-compliant cladding and solve the environmental impacts of rectification works. To solve a problem that previously had no solution and explore a future-focused and responsible way of approaching the issue is the mark of a company that has sustainability at its core and innovation in its DNA.

Fairview is a partner of the 2020 Sustainability Awards.

Energy efficient prefab forerunner

There are few architects than can boast the mantle of pioneering energy efficient prefab residential buildings in Australia. Some of the more significant developments during the 80s and 90s were instigated by architect and project housing entrepreneur John Baird (1924-2010).

Following a successful Melbourne-based architectural practice in the 60s and 70s, Baird established Fairweather Homes in the early 80s. Still operational today under the direction of Paul Adams in collaboration with MODUS Architects, Fairweather Homes remains focused on modularity, energy efficient and durability.

There is a no-nonsense feel to the design Fairweather Homes, and their development process is uncomplicated while also responsive to customer and end-user needs and wants. The architecture and materials talk to natural environments, the bush, the coast, but equally at home in urban environments where a penchant for timber is high on your agenda.

At the core of their projects is sustainability and energy efficiency, and all the fundamentals are integrated, from space planning, orientation and glazing, through to shading, eaves and ventilation. More active renewable energy systems are also incorporated which together with water collections, reuse and disposal, fulfil the most environmentally oriented desires of end-users and occupants.

The smart use of certified timbers is strong theme across the range of Fairweather Homes. Cladding, window frames, wall and roof

framing, are all produced from plantation-grown timbers and the prefabrication process helps to minimise waste and maximise overall resource efficiency.

Fairweather Homes are free of embellishment and superficial adornments; the lines are sharp and clean and respond to the primary objectives of environmental performance in the broadest sense.

It is the heritage of Baird's philosophy that continues in the work of the company. Attention to cost and energy efficiency in a way that can maximise wider access to quality building and good design, is what marks the style and purpose of these modular buildings. Indeed, the outcomes of such thinking resulted in various awards during the 80s and 90s including an Australian Design Award, and MBA Award and a National Energy Award.

It is the simplicity underpinned by substance that makes the late John Baird and Fairweather Homes one of Australia's more significant contributors to advancing prefabricated modular homes and buildings.

More information: fairweatherhomes.com.au
MODUS Architects: modusarchitects.com.au



Plug and play architecture

Creating homes that are environmentally sustainable, flexible, comfortable, and fast to construct and assemble is an essential requirement for many when choosing a new abode. Incorporating modularity and suitability for regional and rural landscapes ticks additional boxes.

Melbourne-based company Modscape has made modularity and environmentally performance an artform underpinned by sound architectural design that features energy efficient systems and services, benign materials and finely tuned logistics and construction. Their homes embody noteworthy environmental performance measures without comprising exceptional design that meets and exceeds occupant expectations.

Considered thought to the physical expression 'beautiful and functional' modular homes that value design, innovation and sustainability, stands out in the work and language of Modscape. This is further extended by their attention to customer desire and site specific factors, including opportunities for passive design that maximises energy efficiency and overall user-comfort.

Modscape is a company where the brands plays out across their activities, buildings and values. There's a strong sense of deep appreciation for the landscape in which their buildings sit, as well as how their multidisciplinary team operates to uphold the company's brand values, including innovation,

sustainability, quality, efficiency, design, customer service and teamwork, to name a few.

However, it is their method and approach to modularity that differentiates their status and what they create for clients. Their construction base in Brooklyn Victoria is the manufacturing nerve centre where the craft of producing high quality takes place. Indeed the process highlights the value of prefabrication being free of delays (or damage) resulting from adverse weather. And of course this helps meet client enthusiasm for fixed timeframes.

Sharply managed modular building and assembly also helps to touch the landscape lightly and minimise environmental impacts that are often directly associated with more conventional construction techniques.

Given the appeal of modular buildings in remote and sensitive landscapes, the environmental benefits of prefabricated structures can help minimise vegetation removal, stormwater management, erosion and related transport and logistics impacts.

During the design phase, Modscape have also incorporated the usual sustainability principles and features. Importantly a clear

life-cycle approach seems to permeate their design process. Passive design capitalises on the site, orientation and sensible decisions related to double-glazed windows, openable skylights and insulation.

Similarly, the choice of materials is informed by health and wellbeing, reuse and paints and adhesives free of hazardous and toxic substances. These are widely accepted measures that central to the materials specification process at Modscape.

Design for modularity involves much more than simplistic, fast-paced prefabrication of portable buildings. To design, execute and ultimately enjoy the beauty of modular construction is to ensure commitment to precision, quality, sustainability and customer satisfaction. In this regard, Modscape appear to have created the template for high quality modular architecture in Australia.

More information: [modscape.com.au](https://www.modscape.com.au)



