



## 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



NATASHA MULCAHY SUSTAINABILITY & ENGAGEMENT MANAGER, SEKISUI HOUSE AUST.



HY WILLIAM CHAN UN SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK



NICCI LEUNG FOUNDER FACILITATOR & DESIGN LEAD, THE LIFEPOD PROJECT



**CHRISTIAN HAMPSON** CO-FOUNDER & DIRECTOR, YERRABINGING



JEFA GREENAWAY DIRECTOR, RAIA. **GREENAWAY ARCHITECTS** 

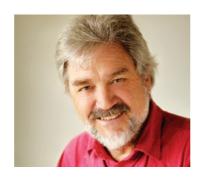


JOHN GERTSAKIS SUSTAINABILITY & ADVOCACY. CAMBIUM COMMUNITCATIONS



JEAN GRAHAM FOUNDER. WINTER ARCHITECTURE

## The **Awards** Jury



DICK CLARKE DIRECTOR & BUILDING DESIGNER, **ENVIROTECTURE** 



JEREMY SPENCER DIRECTOR & BUILDER, POSITIVE FOOTPRINTS



MAHALATH HALPERIN DIRECTOR, MAHALATH HALPERIN ARCHITECTS



MICHAEL FAINE REGISTERED ARCHITECT, FAINE GROUP ARCHTECTS



SANDRA FURTADO M.ARCH, M.BE (SUSTAINABLE DEVELOPMENT)



**NERMINE ZAHRAN** SENIOR ARCHITECT & SUSTAINABILITY MANAGER, KOICHI TAKADA ARCHITECTS



SUZANNE TOUMBOUROU EXECUTIVE DIRECTOR, **ASBEC** 

Visit us at sustainable building awards.com. au

## Q+A with Dr Peter Sweatman from Caroma

With first class honours in Industrial Design, a PhD in user centred bathroom design for older people and more than 15 years' experience in developing water efficient products, there are few more qualified to discuss sustainable bathroom design than Caroma's Dr Peter Sweatman.

We managed to find time in Dr Sweatman's hectic schedule to hear his thoughts on the key motivating factors behind sustainable design, how Caroma compares internationally and the latest user-driven bathroom trends.

A&D: Please can you tell us a bit about your experience and how you started working with Caroma?

PC: I studied industrial design at Canberra University, where there was an opportunity to be involved on a research project with Dr Steve Cummings, the R&D manager at Caroma. I worked on that project as a research assistant, dogsbody and problem solver, looking at developing prototypes to test in the lab to reduce toilet flush volumes. There was a lot of flushing things down the toilet to make sure they performed properly with lower flush volumes. We did field trials, in collaboration with water authorities, which led to several new standards and the release of 4.5/3L flushing toilets a significant jump from the existing 6/3L toilets..

Later, another opportunity came up to work on a research project with UNSW

Built Environment, looking at the effect of bathroom design on the performance of daily tasks in older people. I was involved in was the development of the Liveability Lab, a space that used a variety of technologies, like 3D motion capture, pressure-sensing surfaces and 3D scanning - but also provided a mixed-method approach, such as interviews, talk-throughs and co-design workshops. We realised that a lot of the problems that existed in bathrooms for older people were related to the acceptance of supportive technology.

We focused on individuals and giving them the ability to create an environment that suited them.

I'm currently a designer and researcher on the Caroma design team, looking at strategic product development – how product ranges that we develop fit in with current trends, what people are expecting and future needs, as well as the visual elements and how we can present that to the market.

A&D: Is it unusual for a bathroom supplier to invest so heavily in R&D and water conservation?

PC: It's just part of Caroma's culture. We created the first successful dual flush toilet, which was a turning point for the company and resulted in us becoming the dominant bathroom supplier in the country. Having that strategic focus of always looking ahead, at what we can improve, has given us an edge in the market and against our competitors. Big concerns, such as an ageing population, conserving water, globalisation these are well-known issues that are only going to become more critical over time, so it makes sense to start addressing them now.

A&D: Where does that driving force come from? Is it more philanthropic or business focused?

PC: I think those two incentives broadly align. As an individual working on these concepts, it's certainly a great motivating factor to know that the work we're doing has broader implications and will be beneficial for the environment and vulnerable people. But, ultimately, they're aligned because solutions we can design today will become the standard for tomorrow. Sustainability is as much about being strategic as it is about trying to make a difference. We've





already worked out, based on the success of the dual-flush toilet, that developing cutting-edge, sustainable products works for the business — so that's what we'll keep on doing. If you're in touch with what's happening in the real world, eventually that'll translate to success in the business world.

A&D: How else do you practice sustainability?

PG: Caroma's business is based around finding superior solutions for water, so everything we do considers environmental, social, economic and compliance implications, including ensuring our suppliers meet those standards too. But an awareness of the latest sustainability standards – and the ability to meet them – is a good indication of how well a business is run, so it's something we expect from all our suppliers.

**A&D:** How does Caroma compare to international brands, when it comes to sustainability?

**PC:** We pioneered toilet flush volumes, so I'd say a lot of international brands have been

following us on water conservation. Dual flush has found its way into Europe and the UK, as water supply has become a greater concern in those regions. We believe our CleanFlush rimless toilet design is the best in the world, but we definitely keep an eye on what's happening in the rest of the world and stay aware of how our products stack up.

We recently acquired Methven, a New Zealand brand, which has a presence in the UK and other regions, so that's growing our global presence. We've also been promoting our Smart Command technology internationally, which has given us a lot of attention in China and the UAE at a commercial level. We're definitely looking to export the things that make Caroma different.

**A&D:** What upcoming trends are you seeing in bathroom design?

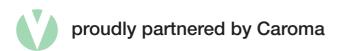
**PG:** The best way to identify trends is to look at how people are using their bathrooms and how their needs are changing.

Bathrooms are the most personal space within the home and people design their bathrooms differently depending on who is using them. Guest bathrooms will often be where people show off their sense of style and taste; the family bathroom is all about usability, and then the ensuite is even more private again, where you can really style it for yourself. At Caroma, we take this into consideration with our different product range stylings.

When we think about sustainability, it's all about appreciating water and how we use it. Our products are the interface in how you use water and if you use it more conservatively, you'll appreciate it more. Our products focus on giving people that added control over how they're using water and getting the most from it.

Another, more practical, consideration is that bathrooms are a costly and difficult thing to install or change. There are layers of waterproofing, plumbing and tiling involved, so people don't take decisions around colours and styles lightly. As a supplier, it's our responsibility to help people feel informed and that they're making the right decisions so they can choose their bathrooms with confidence and know they'll still love it five to ten years from now.

## **Emerging Sustainable Architect/Designer Award Nominees**





**BEN CAINE** LEANHAUS



KAYLIE SALVATORI ARCADIA LANDSCAPE ARCHITECTURE



**TALINA EDWARDS** TALINA EDWARDS ARCHITECTURE

### **Award Winner**

EMERGING SUSTAINABLE ARCHITECT / DESIGNER

### TALINA EDWARDS FROM TALINA EDWARDS ARCHITECTURE

Talina Edwards was one of the first female architects in Australia that qualified as a Certified Passive House Designer and designed a home that successfully achieved Passive House Certification. The award-winning "Owl Woods Passive House" is a ground-breaking project demonstrating leadership with world's best practice in terms of sustainability, performance, efficiency, resilience, durability, quality, beauty, comfort and occupant health. It proves what is achievable, but also necessary in achieving more climate-responsive and responsible buildings.

Edwards has played a leading role promoting sustainable architecture by sharing her knowledge, experiences and passion to inspire others through presentations, articles, podcasts and social media.



## Sustainable interiors by example

So where do most of us spend time? For many, the hours spent inside at work, at school and at home far exceed our time spent under the sky outside buildings.

For Dana Moussaoui, interiors provide a unique opportunity to ... "surround ourselves with natural and sustainable materials" that can be transformative. Moussaoui believes that if you can make a transformation on the inside, that's where it matters, and like people, if you make small changes on the inside then perceptions of the outside will change. She is acutely aware of her sphere of influence and she sees interiors as the key point of intervention given her design discipline and expertise.

Moussaoui walks the talk in sustainable interiors. She is a Green Star Accredited Professional and Director of Design at A1 Office Transforming Workspaces. Not only is she passionate about sustainability, she leads an 'inherently green design team at A1 Office. Moussaoui plays the role of team mentor and proactively train them in the techniques required for sourcing and designing sustainably corporate interiors.

Her team has engaged positively and has developed a unique 'green library' making the selection of green materials a standard operating procedure and not an afterthought. She makes it clear that sustainability should

be part of the DNA at A1 Office empowering the staff to activate key decisions around sustainable products, materials and finishes.

Moussaoui has been in the industry for over 20 years and feels her enthusiasm for sustainable design and greener, cleaner interiors grows with each new project. Inspired by her children, Moussaoui chooses to lead by example. "It is fundamentally our responsibility as professional designers. We get to guide our children into a future we may never see, one that has people in it that positively contribute to the word. We want to grow children that are positive change-makers".

There's nothing superficial about Moussaoui's environmental position and how A1 delivers sustainable projects and outcomes. She believes that contributing to a better world is the least we can do for future generations. Ultimately sustainability is a real-world goal where its outcomes are woven into the fabric of society.

A1 Office is the vehicle through which Moussaoui activates her knowledge and commitment. The company empowers the potential of employees, suppliers and clients by transforming workspaces into their most productive and inspiring form. Understanding a client and exploring their business needs and culture is an essential first step for Moussaoui and A1 Office before the design process begins. In short, A1 Office stands for innovation, sustainability, creation and transformation.

Not only does A1 Office seek to work with industry leaders who want to remain leaders; they aim to educate and help clients to see the possibilities, and deliver them in real terms.

Moussaoui notes that one of her most significant achievements has been the contribution to the design of the Royal Children's Hospital. She reflects on its landmark status and the privilege to work on such an important project. The ability to 'give-back' through design and enhance the lives of people is important to Moussaoui and thus the satisfaction of working on healthcare interiors.

Dana understands how culture and space affect people, and she sees sustainability as a positive influence on this. Moussaoui's vision is a future where sustainability is a mindset that is empowering and transformative rather than just compliance or award driven.

More information: a1office.com.au



# A new standard in sustainable living

Urbane II Bathroom Collection & Liano II Tapware from Caroma

Despite living in the driest inhabited continent – and recently experiencing the most devastating bushfire season on record – Australians continue to consume more fresh water per person than any other nation – a staggering 100,000 litres per year.

Ever since the development of its Dual Flush toilet, in 1980, Caroma has been leading the industry in water conserving technology. Today, Caroma is proud to launch the stunning new Urbane II bathroom collection with sustainable properties featuring an extensive range of toilets, basins, tapware, accessories, showers and baths. The Collection is highlighted by refined and considered thin edge details that give the products a contemporary and timeless appeal.

With colour and material finishes continuing to play a key role in bathroom design, the Urbane II Collection features a stunning range of colour finish options including superior PVD technology for added durability. Incorporating contemporary PVD brushed brass, brushed

nickel and gunmetal as well as timeless chrome and matte black, the refined details of the collection extends to matching basin wastes and bottle traps, flush buttons and Invisi panels as well as matching toilet seat caps. The Urbane II Collection sets a new benchmark in considered bathroom experiences.

For added design flexibility the Urbane II tapware features EasySwitch universal in-wall bodies that allow the tapware colour selections to be easily updated both pre and post installation. With tapware being the statement in the bathroom, Caroma is also pleased to launch its new Liano II tapware range – featuring a timeless pin-style mixer range that is also interchangeable with the Caroma EasySwitch universal in-wall bodies. As a result the customer has a choice of two contemporary tapware ranges in 5 stunning finishes that are fully interchangeable. This simple yet effective innovation not only significantly reduces the cost and building waste involved in changing

tapware, but removes much of the risk involved in the bathroom decision-making process, enabling customers to freely express their personal sense of style.

With Caroma's longstanding commitment to water sustainability – all tapware incorporates industry best WELS 6 Star (4.5L/min) rating. The Urbane II shower range also incorporates both 3 and 4 Star WELS (7.5L/min) shower options featuring award winning V-Jet shower technology for the ultimate customised shower experience.

Combined with Caroma's patented Cleanflush toilet technology delivering superior flushing performance and added hygiene the new Urbane II collection provides the ultimate balance in design, style and sustainability.

For more information about Urbane II or Liano II, visit caroma.com.au or contact your nearest Caroma showroom today.







## A new breed of future architect

How do we bring technology and architecture together to make smart cities work and ensure that sustainability outcomes are meaningful and socially acceptable.

Tuba Kocaturk, is Professor of Integral Design at Deakin University, School of Architecture and Built Environment, in Australia. She is also Director of the Mediated Intelligence in Design (MInD) Research Lab at Deakin University in Victoria, is focused on systems thinking that operates at the intersection of built environment, information technology and design innovation.

Kocaturk shows a clarity of thought when it comes to design and architecture. She is driven by the premise that 'real world problems do not know disciplines' and that real world problems demand genuine collaboration and multiple disciplines to conceive, design, develop and implement enduring solutions.

As an architect turned design researcher and academic, Kocaturk is a leader in her specific field. Her work at the MInD Lab is transdisciplinary and involves a practice-based research group. The research program is timely and acknowledges that smart cities extend beyond autonomous vehicles and superficial use of Internet of Things devices.

Kocaturk has taught, conducted research, delivered keynotes/workshops and published extensively in the areas of Intelligent Built Environment, Digital Design Pedagogy, Design-Driven Innovation, and Digital/Physical Place Making.

Most importantly she advocates the use of 'design thinking' and 'system thinking' as a methodology for knowledge production and as a strategy for cross-sector innovation. This includes various practice-based design studios exploring the creative, collaborative and innovative adoption of digital and media technologies in architectural and urban design.

Tuba is the Senior Editor of International Journal of 'Architectural Computing, which is committed to deepening the understanding of the foundations of digital systems for Architectural and Urban Design and the technologies enabling their development and application. She is also the founding co-director of Resilient Urban Ecosystems (RUE) Research Network and European

Trans-Disciplinary Network of Design. Tuba is currently collaborating with the City of Greater Geelong, in Victoria for the development of the city's future agenda as a UNESCO City of Design."

At a time when Australia is confronting significant social, environment and economic challenges, Kocaturk's work is pivotal. It recognises the potency of design across disciplines and domains to be an effective problem solving endeavour that is agile and adaptive. He understanding of circular economy principles and thinking underscores her wideranging knowledge and what is required to deliver smart cities of the future.

For Kocaturk, technology might be the answer, but she is deeply mindful of asking the right questions that will help inform and empower the architect of the future.

More information: deakin.edu.au/about-deakin/people/tuba-kocaturk



## Stylish, sustainable bathrooms designed for the modern Australian -Vogue Collection

It's often said that the kitchen is the heart of the home... but not anymore. In a fast-changing world, our homes are increasingly becoming a place to escape to and feel safe; and, within the home, the most private, personal space is, arguably, the bathroom.

The bathroom's evolution from a simple washroom to a sanctuary goes some way to explaining the growing demand for ways in which to express a sense of style and personality through our bathrooms.

The Vogue Collection, from Caroma, has been designed and developed specifically to meet the needs of modern Australians. Consisting of five ranges - Urbane II, Contura, Liano II, Titan and Compass - Vogue offers a powerful combination of cutting-edge style, made from the highest quality materials and the latest in sustainable technology.

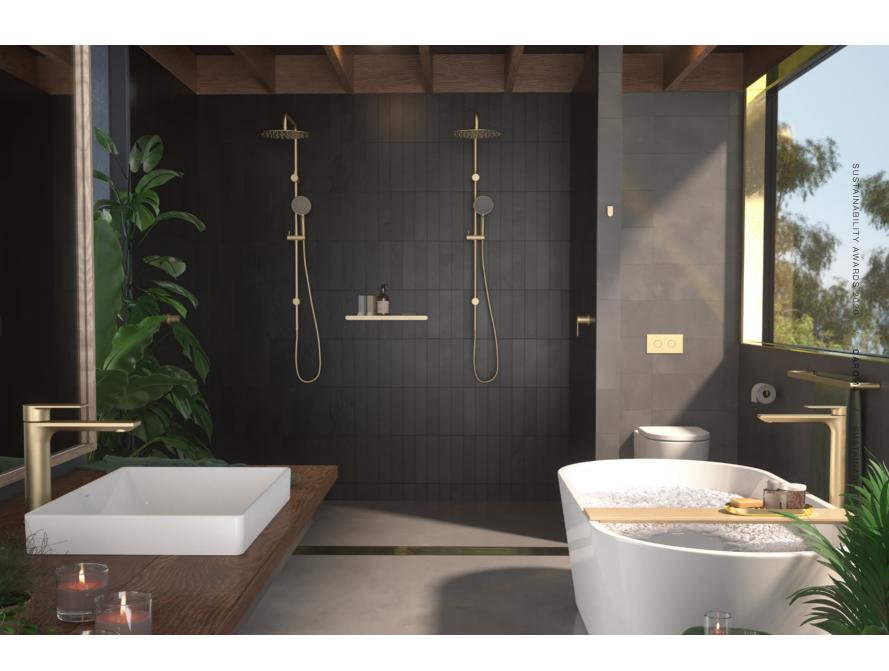
While remaining consistent with the overarching Vogue style, each range within the collection brings its own qualities, offering customers the choice and flexibility to create their dream bathroom, to their exact taste. From the understated and elegant Urban II, to the sharp and symmetrical lines of Liano II or

the quality and durability of Titan's stainlesssteel tapware, Vogue showcases the very best of Caroma's leadership in bathroom design.

Underpinning the collection, as with all Caroma products, is sustainable innovation in order to maximise water conservation. All tapware, throughout the Vogue collection, meets a 5 Green Star rating, while all showers meet a 3-star rating and all toilets meet 4 stars, as well as a 4-star WELS rating. In the Vogue Collection, ultimate style meets the ultimate in research and design, including innovations such as Caroma's Cleanflush® technology - a superior flushing system that's easy to clean and provides full visibility of any grime build up.

For more information about the Caroma Vogue Collection, visit caroma.com.au/collections/ vogue or contact your nearest Caroma showroom today.





# Designed for durability and joy

Collaboration and an interdisciplinary design approach characterises the Ross Gardam studio and his team of creatives.

Designers, engineers and makers combine skills and nous to create furniture, lighting and objects that "innovative technology with traditional craft, resulting in products imbued with subtle historical and ritualistic references." There is a clear methodology in operation across the Ross Gardam team, and this includes responsiveness to environmental factors without being cliched or superficial.

Their approach to product sustainability reflects a sophisticated approach that is considered and informed. Whether it is about energy efficient technologies or attention to materials, their durability and how they are processed to manufacture high quality lighting and furniture.

More specifically, the focus on materials and finishes is comprehensive and talks to the principals of longevity without compromising user joy and visual quality. This is underpinned, in part, by detailed information on product warranties and a clear commitment to 'extended producer responsibility'. They seem to understand that corporate social and environmental responsibility goes beyond the point of sale and warranty periods. Indeed Ross Gardam has evolved the concept to 'extended designer responsibility'.

The studio understands the essence of circular design and the importance of designing-out waste and pollution from the outset. The respect for materiality and how the right decisions can enhance preciousness and longevity is palpable. The words restorative and regenerative come to mind.

It's refreshing and reassuring to see designers and manufactures embracing the substance of circular design and stewardship. By working closely with distributors and local manufacturing partners, Ross Gardam provides specific stewardship solutions to ensure that their products and objects can be given a second and third life. Their stewardship options include:

- Refurbishment of products for possible reuse by existing customer or on selling/ remarketing to new customers.
- On selling or donation of products in existing condition to other commercial businesses or organisations
- Disassembly of products for component and/or materials reuse in new product manufacturing.
- Recycling components if reuse is deemed unfeasible.

The studio's approach and focus on international markets while maximising Australian Made production is noteworthy. The majority of products are hand assembled with care in their Melbourne-based studio which ensures a high quality finish and reflects a devotion to detail.

Their recent product releases of lighting and upholstered furniture exemplifies a thoughtful design philosophy across the product life cycle. Lighting such as Hemera and Nebulae, and furniture such as Place, are testament to the essence of good design, durable materials and interdisciplinary collaboration.

All of this is possible under the direction and choreography of Ross Gardam. His work is often characterised by contemporary innovations "married with traditional processes imbued in heritage and ritual".

It is a studio that creates with passion, explores with rigour and values quality. And thus the joy in their products is overtly tangible.



