# urban warrior

## Is this our greenest expat? We meet the young gun showing Australia that design is the answer for a greener and more liveable future

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The environmental crisis is a design crisis," declared renowned environmental activist Dr David Suzuki in 2006. If this is the case, then hope lies in the hands of our architects, in particular our eco architects, such as Adelaide expat Josh Zeunert. At just 28, he's already won prestigious architecture awards and is currently project-managing part of a $1.7-billion green development in Sydney.

"[Design] is not hypothetical and fluff. It is real solutions to real problems. Landscape architecture possesses the capacity to rehabilitate and reinvigorate; to heal the earth rather than destroy it," Zeunert explains. "Australia's a frustrating place because on the whole we're extremely slow and resistant to change, and we have an economy that's based in primary industries. It's frustrating to come up against it, but at the same time, it presents an immensity of opportunity."

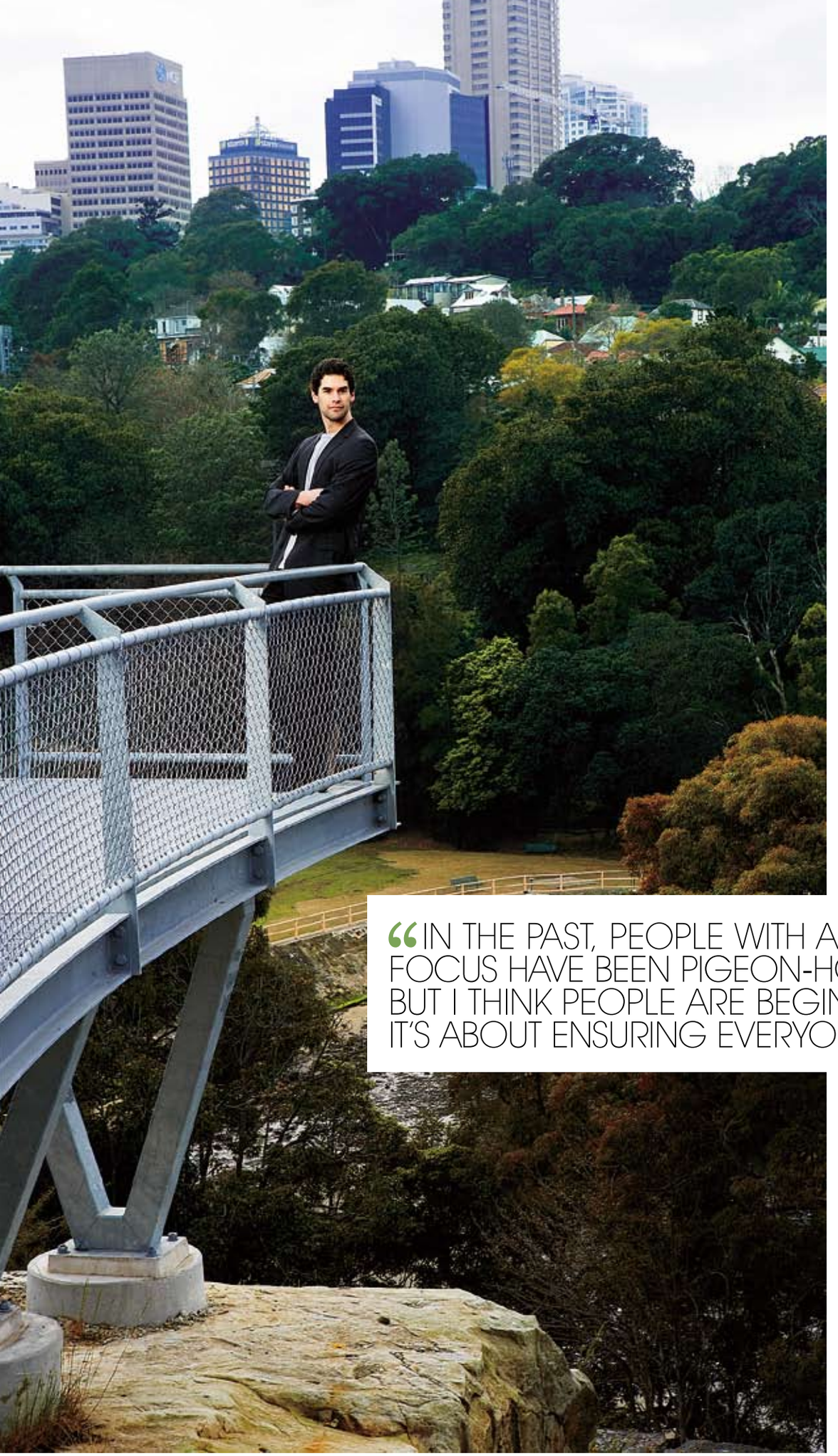
As a landscape architect/urban designer and environmental manager at Sydney firm mcgregor+partners, which is an urban design company taking an environmental approach, it is Zeunert's job to enter projects at key points and to make sure the company is taking the right environmental initiatives, such as using recycled materials and the appropriate native plant species, off-setting carbon and implementing recycling programs.

The firm also practises what it preaches: it operates on 100 per cent wind energy and it donates to environmental and social charities, such as the Wilderness Society.

"In the past, people with an environmental focus have been pigeon-holed as 'greenies', but I think people are beginning to realise it's about sustaining humanity and ensuring that everyone can survive," Zeunert says.

Zeunert is ignited by a deep, underlying passion. In his mind, the world's ecosystems,

Josh Zeunert on the boardwalk at the former BP Park industrial site at Waverton, Sydney, which mcgregor+ partners redesigned into public parkland.



animals and plants are not separate from us and our cities; humans and their clunking, urban infrastructures must learn to work with nature, not against it.

While working as an eco-minded architect often results in frustration – "We operate in a bureaucratic minefield, trying to see our design visions realised," says Zeunert – there are some exciting projects on the horizon.

One of these is Green Square, a former industrial zone outside Sydney's CBD that is being transformed into a revolutionary eco village. The $1.7-billion project will eventually house 5500 residents and 7000 workers, and has been dubbed one of Australia's largest urban renewal projects. Competition to win the urban design project was fierce, with 27 Australian firms vying for the opportunity. The field was then narrowed down to two: Lab Architecture (which produced Melbourne's Federation Square) and mcgregor+partners. The latter triumphed, and Zeunert's schedule went into overdrive.

"I'm managing the project internally here at the office, as well as the sub-consultant team that we employ to deliver the public domain design," he explains. "It's such a massive project. You'll start to see it happening in the next two to three years, but it will be 10 years before the vision will be realised."

Fortunately, Zeunert is no stranger to green projects of all kinds; working as mcgregor+partners' project manager for the Darling Harbour Pavements and the $11-million Ballast Point Park, both in Sydney, Queensland's Sansara Resort and Fiji's Oceania Centre for Arts and Culture (in his previous job).

Currently, he's involved with the expansion of Canberra's National Gallery and its garden. "The current garden is one of Australia's most famous landscape architecture projects, so this project is quite controversial," he says. "People don't think big or holistically. It's easier to think in a compartmentalised way – that's pretty much the way we're taught to think."

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Zeunert, by contrast, has harboured a non-mainstream line of thinking from a young age. "Since I was a 15-year-old reading the job guide, I've seen massive potential in landscape architecture, embodied by [United States designer] Frederick Olmsted and his ecologically transformative visions," he says. "I became a landscape architect to improve the health, ecology and the natural experiential quality of the built environment that we live in."

After six years of studying for three degrees – a Bachelor in Design Studies and being the first Adelaide University student to complete a double degree in architecture and landscape architec-

ture (for which he received First Class Honours) – Zeunert moved to Sydney to become a landscape architect. However, he's not comfortable with that title. "I've got a grand plan to rename the profession 'land architect', or 'earth architect'," he says, only half-joking. "The frustration of studying and now working with architects who cannot think outside of buildings and built form as the solution to the world's problems is as difficult as the years of sleepless nights in getting my architecture qualification!"

Zeunert's tireless, selfless work in creating earth-friendly design solutions speaks for itself. As a final-year architecture student, his grand vision of transforming the Adelaide Parklands into a self-sustaining social and ecological system nabbed him an Australian Institute of Landscape Architects (AILA) award. "Instead of being a linear input-consumption-waste model, I created a self-sustaining circular system," he explains, shuddering at the Property Council's latest plans to build a $60-million, 30km pipe to carry recycled water from Glenelg to Adelaide.

Zeunert's utopian vision, by contrast, pictures world-class urban landscapes with zero waste, filtering and recycling wastewater to irrigate market gardens, vineyards and orchards to reinject new life into the parklands. His 'big picture' vision involves replacing vacant, unused areas with native plants and wetlands, thus engaging the community and providing economic benefits – "not just a big pipe running from Glenelg to water exotic trees".

"The Adelaide Parklands is about three times the space of Central Park in New York, but they're a scenic ideal that no one actually uses. There's so much scope for big-vision things, but we are still in the hangover of European ideals," he says. "My project was about getting people into that area and engaging with it, rather than it being an ideological space." He credits his interest in making city spaces more 'liveable' as originally inspired by famous Danish architect/designer Jan Gehl, whose career has concentrated on improving the quality of pedestrian urban life.

After his move to Sydney, Zeunert worked at Biodesign & Associates for 12 months before beating 60 people to a top position at architects mcgregor+partners. Technically, he was still a fresh graduate, but director Adrian McGregor recognised his raw talent.

"We get applications from all over the world, but Josh jumped out," he says. "Josh is a clever guy and he's very passionate about finding solutions. He really wants to see that passion come to fruition in making change."

Early in his new role at mcgregor+partners, Zeunert collaborated with Adrian McGregor and colleague Jeremy Gill to launch an original idea: a research unit called BioCity, designed to track local and global environmental issues through special projects, including a university 'studio', offered to cross-disciplinary course students that placed urban design and potential crisis situations through a big-picture lens. "We set up BioCity to focus on addressing these macro environmental problems that we're facing, that we couldn't otherwise do through our usual practice," explains Zeunert.

**RIGHT, clockwise from top: the vision for Sydney's Green Square eco village, which is currently awaiting development approval; an artist's impression of the Darling Harbour pavements; the Ballast Point Park project, which is due for completion in early 2009. OPPOSITE: the former BP Park project by mcgregor+partners is what first attracted Zeunert to work for the design company.**


"We're looking at the city as a large, living organism, rather than just a standard machine of inputs and outputs. Essentially, what we do is ask students to perform a 'health check' on the city and examine how it's going to fare in 2030. How does a city provide water, food and shelter? It sounds simple, but when you put our wastewater and food and agriculture infrastructures against future projections like climate change, peak oil and costs associated with that, alarming results emerge as to what 2030 will be like."

BioCity has been conducted at the University of NSW and Adelaide University, bagging a New Directions award from the Australian Institute of Landscape Architects (NSW). Looking ahead, there are plans to roll out the BioCity initiative to universities nationally and internationally. "We break students into groups to research different elements, such as water, wastewater, agriculture, food, energy, transport, biodiversity and governance in relation to Adelaide, and test each in an environmental crisis scenario," he says. "The traditional economic model, which the whole globe is essentially operating under, is problematic because it's based on continual growth. We're trying to get through the political spin and find effective solutions."

The most powerful outcome of BioCity, points out Adrian McGregor, is how old-fashioned design approaches are shattered and students' perspectives are forever broadened. "So many people who came through the course told us it had really altered the way they thought about the city," McGregor says. Adds Zeunert, "We're challenging the planning profession at large.

We're saying, 'We are thinking holistically with a bigger picture than a planner traditionally would.' A lot of town planning documents come through government. We're not constrained by political agendas in what we're doing.

"Governments want a short-term, simple solution [to environmental problems], a silver bullet, a quick-fix. The angle we come at through BioCity is that it's not really a long-term, viable solution. We try to think of more sustainable, sophisticated systems that work with natural systems, rather than relying upon conventional fossil fuel industries to sustain them – because that's not going to happen in 2030."

The students who graduate from the BioCity studio become well equipped to offer endless creative and practical suggestions to combat such environmental crises. Equally important, the BioCity students' final presentations of research findings and design solutions are then presented to a panel of experts, from the presidents of AILA, the Royal Australian Institute of Architects, the Planning Institute of Australia and the CSIRO to city councillors and energy, water and social experts. In other words, people who have the power to make things happen.

"You could put [our findings] in front of a journalist or [Premier] Mike Rann and demonstrate that the solutions to these problems that are being plugged are not the best ones," Zeunert states. He maintains that popular ideas for solving Adelaide's water shortages, such as building a $1.2-billion desalination plant, are not viable.

"In Sydney, we tested that model in our BioCity studio and asked, 'Is desalination [desal] an appropriate solution to the potential water crisis Sydney is facing?' We proved in cost-effectiveness and sustainability terms, it wasn't a good solution," he says. "Desalination plants take an absolutely massive amount of power to run. In the case of Sydney, we found that a desal plant could only supply six per cent of Sydney's water supply, but would use 100 per cent of Australia's current green energy grid to provide it."

The findings from the various BioCity studios will be published on an interactive website by the end of the year, enabling people to access green data and solutions to the major problems faced by cities.

Zeunert's own goals are still unfolding, although he can envision himself as a consultant to cities, advising them how to improve the "big-picture ecological mechanisms" and withstand increasingly uncertain social, economic and environmental climates.

"Environmentalists have been calling on this sort of thing for decades and people are just starting to listen. It takes a long time to implement these sorts of things – the three-year cycles that flip-flop around in politics are making it harder. Small changes aren't going to do enough. There needs to be more and we need to do it quickly," he says. "It's the big picture stuff that interests me and implementing things on a large scale – cities, metropolitan regions and states taking a few calculated risks to really make the transformation we need."

> "LANDSCAPE ARCHITECTURE POSSESSES THE CAPACITY TO REHABILITATE; TO HEAL THE EARTH RATHER THAN DESTROY IT"

### Josh Zeunert's top 10 tips for a greener Adelaide

**1 Stop urban sprawl** Adelaide needs to concentrate on building greener buildings upwards – not outwards.

**2 Make housing more affordable** to encourage the 400+ newcomers who arrive in Adelaide every week to settle centrally, avoiding expensive and polluting commuting.

**3 Avoid and reduce energy consumption**; expand on solar, thermal, wind, tidal and geothermal energy to reduce emissions and break reliance on finite and polluting fossil fuels. Stop all subsidies to major polluters.

**4 Create a more efficient water cycle** to increase water recycling and reduce and break dependence on the Murray River altogether; explore the merits of a water-trading system.

**5 Reorganise our food supply** Farm nearer to the city using organic/permaculture principles; reduce the dependence on fossil fuel inputs for fertiliser, pesticides, harvesting and transport.

**6 Create financial incentives** for a more resource-savvy waste system with the goal of no further landfill and 100 per cent waste recovery/recycling.

**7 Tax private car use and congestion**; direct these into an improved public transport system that prioritises bus, tram, train, cyclists and pedestrians over private vehicle use.

**8 Recognise nature's value** Protecting and valuing SA's unique plant and wildlife biodiversity has a direct link to our economy (through tourism, service industries, etc).

**9 Support new industries** (eg, renewable energy and carbon banking), which equals new jobs and ongoing growth.

**10 Establish an independent authority** focused on addressing long-term issues with bipartisan and/or community agreement.