

Australian landscape Architects making a difference through climate-positive design



Monash university Forum landscape. Taylor Cullity Lethlean with Peter Elliot Architecture and Urban Design. Kulin nation.
Photo: Will Salter

“This century is the golden age of landscape architecture. The world really needs you. It needs what you know and what you believe in. Now is the time.” – Martha Schwartz, New Landscape Declaration Summit, 10 June 2016

Landscape architects are uniquely placed to lead and deliver climate-positive design solutions for our planet. We have the ability to sequester more greenhouse gases than our projects emit. AILA’s Climate Positive Design Working Group is developing a clear roadmap so Australian landscape architects can deliver climate-positive design outcomes.

If you are a landscape architect wanting to address climate issues, the [Climate Positive Pathfinder](#) application is a great starting point. This free web-based tool can help you to calculate your project’s greenhouse gas budget and climate-positive date. To make the app even easier to use, AILA has produced a five minute [explainer](#) and an hour [webinar](#) explaining how it works, along with a step-by-step demonstration of how to enter your project data into the application. We have also developed our “top six things” a landscape architect can do to be climate positive, along with questions and answers, and an Australian “cheat sheet” to the Climate Positive Pathfinder application. These are now on the climate positive design page of the [AILA website](#).

The working group is currently developing three documents to launch in February 2022. The first is the **Climate Positive Design AILA Roadmap**. This will provide AILA with the targets, time frames and actions to help roll out climate-positive design to members. The roadmap has been informed by an international benchmarking review of the climate policies and strategies of other landscape architecture organizations including the Landscape Institute. Following the review, we framed the roadmap around three key ideas:

- Providing support for AILA members to understand and deliver Climate Positive Design;
- Providing leadership within the profession by engaging AILA with other institutes, businesses and professional bodies to promote and enable Climate Positive Design across disciplines;
- Developing policy that positions AILA and its members as leaders and advocates in the climate-positive space.

The second document is the **Climate Positive Design Action Plan for Australian Landscape architects**. This aims to provide clear, simple advice on what you, as a landscape architect, can do to understand and deliver climate-positive design through your projects and practice. It is framed around three big ideas.

- **Understand** the environmental and carbon impacts of what we do through evidence-based research.
- **Manage and mitigate** these impacts through good planning and design.
- **Advocate and educate** for better understanding of carbon neutral and climate positive design with our clients, colleagues, collaborators, stakeholders and Government.



Fairbridge Children's Park. CLOUSTON Associates. Wiradjuri Country. Photo: Brenton Cox Photography

For our *manage and mitigate* section we are developing a **climate mitigation and adaptation tool kit** focused on co-benefits. The Landscape Institutes publication "[Landscape for 2030](#)" has been instrumental in guiding this section of our document. We also drew upon the CSLA including "[Nature based solutions by design](#)" and ASLA's "[Smart policies for a changing climate](#)". Complementing this is a guide for landscape architects on implementing the tool kit across various scales.

Responses to climate are often placed into two key areas. Firstly **Mitigation** measures that directly reduce green house gases that are heating up the planet.

And secondly **adaptation**, which is about responding to changes anticipated with rising temperatures, rising sea levels and climate change.

In reality the work of Landscape architects integrates both, along with other **co-benefits** such as social justice biodiversity, economic uplift, health and well being. These include:

- Social co-benefits - improving the quality of life, protecting the vulnerable, being socially equitable and just, providing the right to clear air and water and local food, providing for mental health and well being
- Biophysical co-benefits - protection from extreme heat, resilience to extreme weather events, designing for sea level rise
- Environmental benefits - lastly protecting the rest of the planet – our natural systems and environments.

When we plant a street tree it is providing both mitigation and adaptation outcomes. It mitigates by pulling CO2 out of the atmosphere helping to cool the planet. It provides adaption to increased urban heat by shading pavements, and provides air cooling through evapotranspiration.

The tree also has multiple co-benefits. It captures urban storm water and filters pollutants out of the atmosphere. It is attractive to look at, it provides health and well being benefits, along with nesting and food for insects and birds. Studies have shown that street trees also improve property values.

The last section of this report focusses upon communication and advocacy. So how do you engage your boss and work colleagues in climate positive design. What are the opportunities for talking with our industry partners and influencing government policy. The American Society of Landscape Architects recently published their excellent "[Climate Act Now: A landscape architects guide to climate advocacy](#)" which our guide will be drawing upon.

The third document we are preparing is an **Organisation Guide to Becoming Climate Positive** for landscape architecture organizations and practices. This will set out the steps your organization or practice will need to take to achieve carbon neutral certification, and beyond, to become climate positive.

The draft document sets will be go out for Australian and International peer review after COP26. Final versions are expected to be published in February 2022.



Reimagining Your Creek. REALMstudios with Alluvium Consulting and E2DesignLab. Kulin Nation. Photo: Rory Gardiner

In addition to the working group activities, a number of the team have been working with three agencies: the **Australian Sustainable Built Environment Council's** (ASBEC) collaborative Resilience Task Group, the **Material and Embodied Carbon Leaders' Alliance** ([MECLA](#)) and the **International Federation of Landscape Architects** (IFLA).

Upfront embodied carbon in construction materials forms a large proportion of emissions for landscape architecture projects. Reducing embodied emissions is critical to landscape architects becoming climate positive. We have set Australian landscape architects a target of 75% emissions reductions by 2030 and zero emissions by 2040. To help drive industry solutions for low carbon materials, AILA has joined the MECLA as a founding member. Our role in their working group focuses on developing a common language and specifications to make it easy for designers to specify low-carbon materials.

For COP26 three Australian's joined a small team from IFLA to craft the one-page declaration for the United Nations Climate Conference. The [declaration](#) is a call to action on behalf of the 77 nation states represented by IFLA to limit global warming to 1.5 degrees. It aims to show that landscape architects are accelerating climate action at scales that matter.

David Attenborough has called climate change “the defining issue of our time.” The science is very clear. We must act decisively to protect our planet for thousands of future generations. There are 70,000 landscape architects worldwide ready to deliver cool green cities, climate-resilient landscapes and beautiful places that foster health and mental wellbeing.

Our time is now.

Martin O’Dea. Australian Institute of Landscape Architects - Climate Positive Design Working Group chair. 10th December 2021

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The AILA CPDWG group comprises Abi Kearney, Martin O’Dea, Simon Bond and Sarah Morgan (NSW), Verity Campbell, Brendon Burke and Lakshmanan Madhu (VIC), Kate James (SA), and Madeleine McEwen (WA). Adam McEllister (QLD) was part of the working group from December 2020 to March 2021). Jasmine Ong is the AILA National Board representative.