Call to Action

British Landscape architects respond to climate change adaptation and mitigation

By: Thea Gordon-Rawlings and Dr Alessio Russo

Recent extreme weather events, including floods in the UK, raging bushfires in Australia brought on by heatwaves and droughts has firmly cemented the imminent need to find solutions to mitigate and adapt to climate change.

The 2018 Intergovernmental Panel on Climate Change (IPCC) Special Report, Global Warming of 1.5°C warns that the impacts on natural and human systems from global warming have already been observed and we urgently need to limit warming to 1.5ºC. Landscape architects have a major role to play in this attempt to mitigate and adapt to climate change.

UK Landscape Architects have declared a climate and biodiversity emergency with an online petition http://uklandscapearchitectsdirectors.com/. Founding signatures of the petition include: Churchman Thomlin Finch, Dan Pearson Studio, Gillespies, Grant Associates, Austenford Porter - Bowman, J & L Gibbons, Kim Willico, Kinnair Landscape Architects, Landscape Projects, LUC, LDA Design, Nigel Dunsnett, Studio Englishback, Townsend Landscape Architects.

The petition aims to raise awareness of the climate and biodiversity emergencies and the urgent need for practical action amongst our clients and supply chain, explained one of the landscape architects.

It also advocates for far-reaching change in the landscape profession towards resilient and regenerative design practices as well as higher government funding priority to support their action.

Other key aims include: establishing climate and biodiversity mitigation, adaptation and resilience principles as the key measure of our industry’s success demonstrated through awards, prizes and listings. Sharing knowledge and research to that end on an open source basis.

Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach.

Preserve and protect existing irreplaceable landscapes and habitats while protecting and optimising areas of functional and biodiversity landscapes in all developments.

Adopt a whole systems approach to landscape design recognizing that pollute, bacteria and mycorrhizal fungi are key factors for ecosystem survival and carbon sequestration.

Work to provide assessment tools for life cycle costing, carbon usage, biodiversity gains, design and promote cost-effective tools and measures to assist in the management of landscapes.

In addition to working with mitigation, adaptation and resilience as primary tools, tools to use regenerative design principles in the design of landscapes.

Collaborate with architects, engineers, contractors and clients to further reduce construction waste.

Promote low embodied carbon, and look to maximise carbon sequestration, responsible and sustainable use of water and biodiversity net gains in all projects.

Minimize wasteful use of resources in landscape architecture and urban planning, both in quantity and in detail.

Several tools and models (e.g. -The ECO Climate Positive Design) can be used to assess the carbon footprints for landscape architecture projects. In addition, we also need a holistic approach that should consider 6 principles: Materiality and Circularity, Adaptability, Net-gain and Nature connection.

Materiality and Circularity

We need to focus more upon selecting species of plants which are going to tolerate the future climatic changes which are forecast.

We need to use non-destructive materials, the construction industry being one of the most polluting on the planet.

Adaptability

Following on from the previous point, we can use the amount of soft landscape in our designs to reduce the demand for polluting mineral products and the effects of transporting them and make our productive landscapes work harder for both people and the environment.

We can focus on planning in feedback loops and creating designs which create virtuous cycles, utilising locally available waste streams to inform, form and feed our designs.

We need to be thinking generations ahead in terms of stabilising soil and locking in carbon (e.g. in trees), but also designing landscapes which can be reconstructed and reconstructed easily so that we can adapt them to changing conditions and reuse their constituent parts as they come to the end of their intended lifecycle.

Net-gain

This principle for development will have a large impact upon the work of landscape designers. We tend to propose designs which are ecologically sound and seek to enhance the natural environment and biodiversity anyway, but new policy will necessitate this, which may mean working more closely with ecologists - other countries may well follow suit.

Nature connection

Creating wider, linking landscapes in cities and elsewhere so as to enhance biodiversity and slow climate change will require that landscape architects pay attention to how providing more space for wildlife to thrive can truly benefit people and be introduced sensitively ensuring that people’s health, safety, mobility and enjoyment of human-centric settlements is not compromised. Landscape architects can also facilitate the connection between people and landscape designs which benefit natural and combat climate change by creating installations, public art and designing human-nature interactions.

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