

S'pore architects, engineers sign green petition

Republic is first country in Asia to sign Construction Declares which takes action to avert climate crises

By Tay Suan Chiang
taysc@sph.com.sg
@TaySuanChiangBT

Singapore

SINGAPORE may not have bushfires or major floods to deal with but this does not mean that the country has no environmental problems. Future climate projections include rising daily mean temperatures, rising sea levels, and more frequent and heavy rainfall as the world gets warmer.

Buildings and construction account for almost 40 per cent of energy-related carbon dioxide emissions, and are a major cause of climate breakdown and biodiversity loss.

Seeing the urgent need to change

the building and construction processes, a group of Singapore-based architecture and structural engineering firms have signed Construction Declares, a global petition uniting all strands of construction and the built environment.

The petition is a public declaration of Earth's environmental crises as well as a commitment to take positive action to avert further crises.

Construction Declares was started in June 2019 in the UK, and has since garnered over 4,000 signatories in Europe and Oceania.

Singapore is the first Asian country to sign the declaration with 12 architecture and structural engineering

firms including CSYA, Forum Architects, Guz Architects, Hassell Architecture, SCDA Architects, ARUP, DP Engineers, RSP and Web Structures as founding signatories.

Angelene Chan, chief executive of DP Architects, one of the 12 founding members said: "As architects and engineers, we have a responsibility to ensure a sustainable built environment. Thus, it is our duty to raise awareness in the industry and to advocate positive and practical measures that can mitigate the impact of the built environment on climate change."

By signing the declaration, the firms seek to raise awareness of the climate and biodiversity emergencies, and the urgent need for action among their clients and supply chains; establish climate and biodiversity mitigation principles as a

key measure of their industry's success; adopt more regenerative design principles in practice, with the aim of providing structural engineering and architectural design that minimises embodied carbon footprint to help achieve the standard of net zero carbon, among other actions.

Global engineering firm WSP already has sustainable practices in place, but its Singapore managing director Raymond Lo said that firm signed the declaration because "we hope to raise greater awareness among clients and industry partners to embrace sustainable practices, whether in the workplace or in the built environment".

Mr Lo added: "WSP is now working to embed these aims in comprehensive discussions with clients regarding project aspirations and design objectives to ensure that our ultimate

designs are sustainable and future ready."

Another founding firm is WOHA Architects which is known for its green practices. Co-founder Richard Hassell said the firm will be putting across the declaration to clients for future projects. "The declaration is a good consensus document to share with clients because it sets the expectation that more needs to be done, and that good and responsible clients should help to develop better outcomes and not fall behind other developers," he said.

Mr Hassell felt that one of the calls to action – which is to upgrade existing buildings for extended use as a more carbon-efficient alternative to demolition and new build whenever there is a viable choice – may be challenging because in Singapore the idea of "newness" is prevalent. "We're in

dialogue with URA (Urban Redevelopment Authority) to study whether a penalty system with regard to tearing down buildings might make sense. This would mean that developers would be charged a penalty for demolishing an existing building depending on the age and potentially other criteria. This could be an incentive to keep and upgrade existing buildings," he said.

Hossein Rezai, founder of Web Structures, who started the ball rolling by calling on his associates to sign the declaration said he hopes that more architecture and structural engineering firms will join his firm in making the commitment.

"We want to make these commitments a norm for firms involved in building and construction, regardless of their size. What matters more is the attitude to making changes."

Source: The Straits Times © Singapore Press Holdings Limited. Permission required for reproduction.