Urban planning and design innovations – The Singapore Model

Singapore has a few other innovations and radical designs that cities around the world could adopt to tackle extreme heat and avoid urban heat islands, adds Chow.

"Among the push towards more 'green' buildings and the implementation of the Singapore Green Plan 2030, is a move towards science-based policies in reducing urban heat risks," he says. "Together with colleagues in several universities in Singapore, I've been leading research into the Cooling Singapore Initiative since 2017.

"Our most recent project involves developing an innovative Digital Urban Climate Twin that stakeholders can use to ascertain which heat reduction approaches give the 'best' outcome for different parts of Singapore's urban landscape. This Twin is based on coupling several environmental models that are tested and parameterised with observed data to ensure that these are representative of Singapore's urban climate context. It is hoped that it can contribute to ensuring the urban resilience of this city-state towards climate change-related heat risks.

"I think that a blueprint, such as the recent IPCC report for human

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Singapore

The move towards science-based policies in reducing urban heat risks has led to research from Singapore Universities called Cooling Singapore Initiative which started in 2017.

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