

Inside the Sandbox of Sustainable Urban Development

By 2050, 68% of the world's population will live in cities. The vulnerability of these cities to heatwaves, flooding and pollution is also increasing, alongside their production of greenhouse gas emissions – **75% of all greenhouse gas emissions derive from cities.**



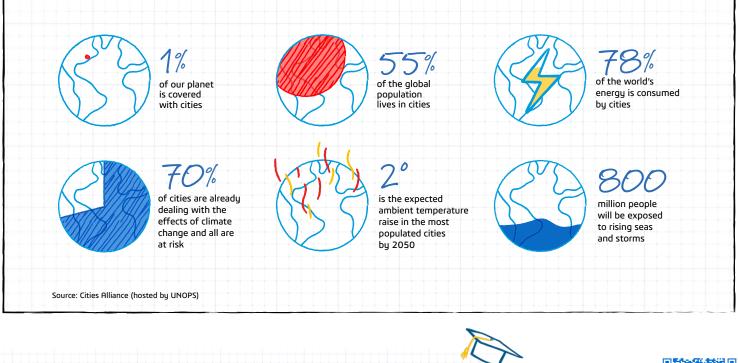
Authorities in charge of driving sustainable urban transformation may struggle with siloed organizations, disparate or incomplete data sets, regulatory hurdles, and budgetary restrictions. The solution comes, in part, from virtual twins.



For example, by building **virtual twins informed by meteorological data**, cities can better identify hazardous heat islands, and create targeted solutions to limit their impact, such as revegetation, building insulation, and the optimization of roadsurface materials.



Virtual twins offer a powerful solution for harmonizing stakeholder groups. By simulating different scenarios, they enable effective budget and resource allocation to projects with the greatest potential for lasting impact – also facilitating clear communication of these decisions to both public and private stakeholders.



By partnering with for example the Southern California Institute of Architecture, Dassault Systèmes is helping **ensure the next generation of urban planners get hands-on experience** with solutions like virtual twins, which will be vital in building the sustainable cities of tomorrow.

Want to find out more?

Meet the Infrastructors



