

Nordic Association for Hydrology -chairman's corner

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Water Architecture! Can it be a new paradigm for livable and resilient cities?

Chair's corner in history

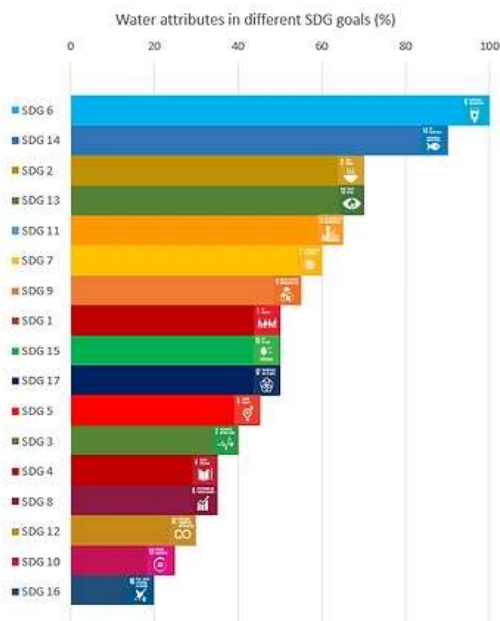
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Human beings are facing the two sides of water simply because the water can float a boat, so can it swallow the ship. With the hard facts of global climate change and frequently increasing extreme water events, it is inevitable that we must take good care of water in our daily life. Water Architecture for Livable and Resilient Cities (WaArch) is a concept to address both water (technical and social) and architecture (functional and aesthetic) for future society. It is designed to be an integrated and holistic approach not only to meet the future challenges but also make it a livable and joyful for future citizens. Considering the UN Sustainable Development Goals (SDG:s), water architecture will bridge several gaps since many of the SDG's are directly or indirectly linked to water and living environment. Water is vital and essential for sustaining all lives., and at the same time, we need to create a sustainable and resilient habitat for future generations. Furthermore, water architecture has a strong impact on social sustainability with both living condition and health. Two important elements should be present in a society. One is welfare which means that people should have a decent standard and live in an enjoyable environment. Welfare also means that the good things in life should be fairly equally distributed. The other element is that social systems, like societies, should have capability to solve problems that people are facing. The beneficiaries are all stakeholders living in the society tightly associated with water and architecture.

Following core issues should be considered in the water architecture concept by joint efforts of urban designers and water scientists:

- Technical issues: From the "water sensitive urban design", "Best Management Practice", "Low Impact Development" to "Blue Green Infrastructure and Sponge city" for resilient storm water retention and re-use.
- Design aspects: Urban Form; Innovations for streetscapes such as Living laboratories; Experiencing water; Climate Neutral and Secure; Water Front Design; Urban Farming and Low Carbon; Added value with vitalized environment of water, air, vegetation and microclimate for and increased joyfulness.
- Urban water security and innovations: Every drop counts to secure the water supply.



With the future challenges of the society, this concept should be able to tackle multi-stakeholder problems concerning following aspects: water Infrastructure and Landscape

Stormwater; ecological restoration and waterfront; design urban farming and smart water systems, secure drinking water supply, microclimate and the synergies of water/land/vegetation nexus effects. Let's take into account all of these aspects when working towards a sustainable development!