

Nature based solutions for future-proof cities





"Climate adaptation is a phenomenal opportunity to improve the quality of life."

Ian Short, former CEO Climate KIC

The world is urbanizing. In 2050 over 6 billion people will live in cities. Climate change will have large impact on cities and will increase the risk for floods, droughts and heat waves. Worldwide 90 trillion US dollar will be invested in urban infrastructure over the next 15 years to replace ageing infrastructure and realise urban densification. Every redevelopment project offers huge opportunities to create value and synergy with climate mitigation and adaptation goals. Cities around the world are looking for integrated and nature based solutions to create resilient and liveable cities.

## Our approach: Landscape and Nature Based Adaptation •

Nature based solutions reduce the risk for floods, droughts and urban heat, provide ecosystem services and improve the liveability of cities. Wageningen University & Research has a broad knowledge on blue and green approaches and nature based design for cities at regional and city scale providing an evidence base about costs and benefits for climate resilient cities. We consider the soil-water-green system as fundament for landscape based adaptation. We strongly believe in cocreation together with authorities and local stakeholders for design and implementation of nature based solutions.

# Example projects: Adaptive Circular Cities and Water Smart Cities

How can cities simultaneously contribute to climate change mitigation, adaptation and resource efficiency? Together with national and international partners we combine forces to take up the challenge of Adaptive Circular Cities. We also developed a roadmap towards Water Smart Cities. A transition is needed to (re)design cities from drained cities towards water smart cities in order to restore the natural drainage capacity of cities and close the urban water cycle. A Water Smart City treats water as a resource instead of as a nuisance. Smart combinations of technical, civil engineering and nature based solutions for climate adaptation and the transition to the Water Smart City approach will create large business and innovation opportunities. Collaboration between businesses, public authorities, researchers and citizens plays a unique part to ensure rapid transition.





#### Our services

- Climate risk assessment/vulnerability studies for cities
- Landscape and nature based adaptation strategies
- Climate ateliers / design ateliers interactive design sessions with stakeholders
- Adaptation Support Tool supporting nature based adaptation strategies
- Urban heat stress modelling
- · Green health check
- Water sensitive urban design

## Research Program

Climate Adaptable Society

### Contact

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