



# TRACTEBEL



ENGIE



## WATER URBANISM

Urban Development

---

Exploits water as a positive and generative agent for cities and citizens

---

**Tractebel** is a worldwide multidisciplinary engineering, consultancy and design firm working on a wide range of projects in geographies around the world. Every day our teams of engineers, consultants and designers feel the need for a more sustainable urban development to build a better world for all, today and in the future. Therefore we developed together 11 integrated approaches for cities and territories; they represent the needs and interests of cities and citizens and aim to provide solutions to key global challenges.

### why?

The challenges brought by **growing populations, the ever-expanding reach of urbanization and climate change** (water supplies needs, drought and flooding, storm waters and basin management) , as well as **the use of water for massive energy production, make water an essential issue in the future.**

The fact that rivers are often transnational or even transcontinental structures makes water a possible issue of conflict. The use of water in one country has an impact on the presence of water in another country and can influence flooding or drought. Already today there are conflicts between for instance China and India for the Brahmaputra River or between Turkey, Syria and Iraq for the Euphrates River. New international efforts are needed to protect water as a common resource for all.

### what?

Water Urbanism can provide sensitive and resilient solutions to these challenges, effectively designing self-sustaining urbanized environments.

Water Urbanism concentrates on water as the main agent in the process of development of human settlements, from neighborhoods to cities and territories - **water being understood as a common resource, a need, a potential threat and an opportunity.** Water urbanism integrates different disciplines to design cities, territories and infrastructures able to deal with water issues in a natural, integrated and socially equal way.

Water Urbanism applies to many aspects of urban water management including **reliable access to clean water, flood protection, coastal protection, ground water protection, design for climate-sensitive areas, land and water based natural systems.** Water Urbanism demands per se a territorial approach.



**Zeeheldenplein, Ostend**

The need for a better protection of the dyke is the starting point for upgrading the urban promenade along the North Sea. A technical infrastructure is transformed into a vibrant public space. With an event square and a large fountain as its main focal points.



**Open up Demer canal, Diest**

The historic course of the Demer in the city center of Diest is re-opened and restored. A qualitative design of the public spaces along the water line of the Demer creates a sequence of attractive areas that are perfectly embedded in the network of open spaces in the city while offering new temporary water buffering storage system for the city in case of heavy rains episodes.



**Leiedoortocht, Wervik**

The upgrading of the Leie for water transport is used as a catalyst to redefine the urban fabric. A new public promenade is developed along the banks of the Leie. This promenade links squares, parks, recreational facilities and new urban developments.



**Materialenkaai, Brussels**

An old industrial quay facing the developing area of the Tour & Taxis area in Brussels is transformed into an attractive green space for the city of Brussels. The new public space encourages a new relationship and proximity between the promenade and the water of the Brussels canal.

10 other integrated approaches to discover

- Urban Resilience
- Productive Landscapes
- Places of Mobility
- Territorial Transitions
- Eco-Districts
- Recycling Territories
- Smart Networks
- Civic Architecture
- Sustainability @Work
- Digital Urban Solutions