

BLUE-GREEN CITIES IN THE SPOTLIGHT: ANTWERP

By the City of Antwerp and Bax & Company

An introduction to Antwerp's Water Plan: a holistic and co-creative approach to tackling the challenges of climate change.

Climate change is posing substantial challenges for today's global society. Just like any other European city, Antwerp is also prone to the expected consequences of climate change - like flooding, drought and water shortages. The city often endures frequent and extreme rainfall, but also experiences bouts of extreme heat, resulting in longer periods of drought and decreasing groundwater levels. These challenges will only amplify unless we meet them through a holistic and co-creative approach. Acknowledging the urgency, the city of Antwerp did just that, by developing a fully-fledged strategy that combines readiness, resilience and viability.

Planning for climate change: Antwerp's Water Plan

Following Antwerp's endorsement of the 2009 Covenant of Mayors, the city drafted subsequent climate plans which stipulate a road map for a zero-carbon city in 2050 and entail an array of adaptation measures. Because climate change is a multi-faced threat, the climate plans were subdivided into thematic strategies. As part of this city-wide strategy, Antwerp developed the Water Plan.

The vision of the Water Plan seeks to integrate short and long-term solutions for the city's water challenges. However, instead of solely focusing on the problems caused by climate change, the Water Plan equally highlights the spatial potential and qualities that blue and green infrastructure can provide for dense urban fabrics. It also tells the story of Antwerp as a historic water city and provides a narrative glimpse into Antwerp as a future water-sensitive city, in order to increase water awareness.

The Water Plan narrates not only a hydrological and spatial blueprint for the city but also frames the transition of existing design strategies and implemen-



Click the image above to explore Antwerp's Water Plan; ensuring a water-robust and water-conscious city

-tation processes for the coming decades. Antwerp organised several (design) workshops with a mix of sectors in order to gain better insight into possible complexities and bottlenecks to implementing this methodology and vision. Multiple design proposals for different locations in Antwerp were hydrologically calculated, spatially visualised and openly discussed with these different stakeholders. A water city can only be effectuated by its government(s), businesses and community organisations together.

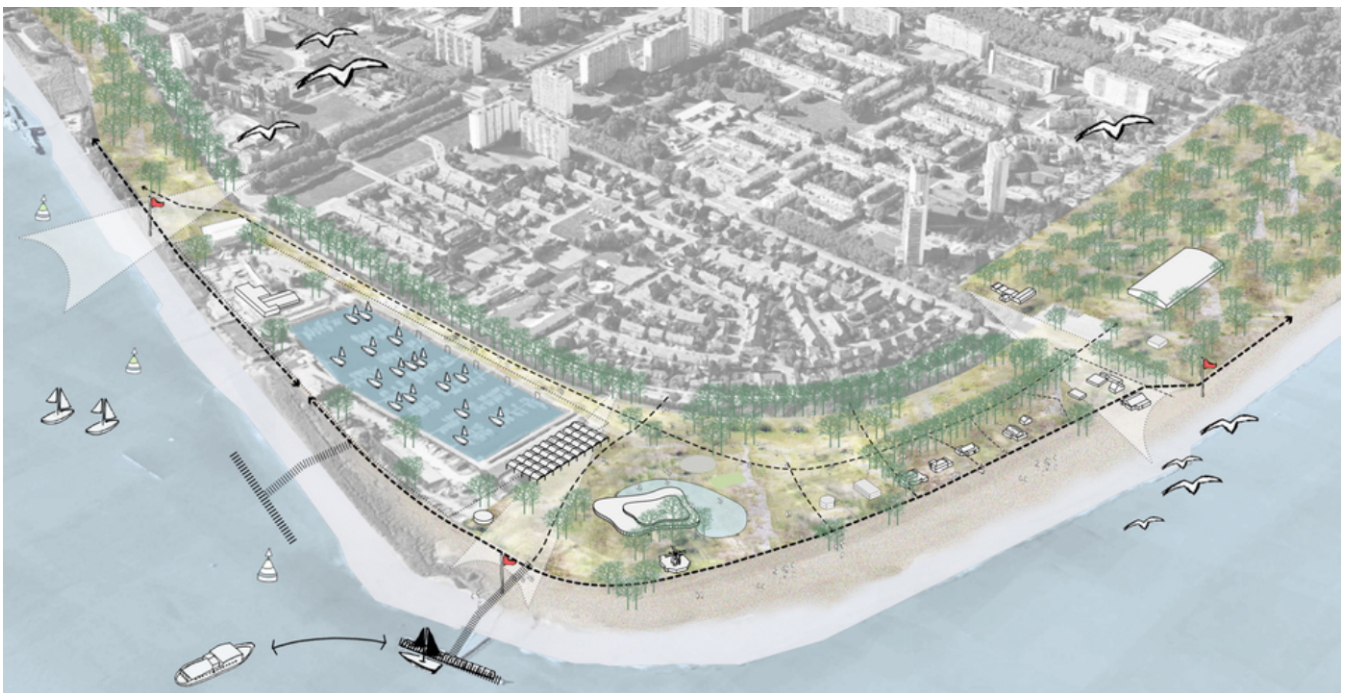
Why is the Water Plan important?

- 1 It not only addresses water resilience and water sensitivity but also addresses the most urgent climate change issues, as a result of collaboration between stakeholders from multiple domains.
- 2 The enrolment of the Water Plan will include individual water plans for each neighbourhood, with a priority for the worst-affected areas.
- 3 Its development involved several (design) workshops with multiple governments, sectors and stakeholders, which is key to achieving a stronger transition.

Implementing the Water Plan

Re-designing the Scheldt river left bank: a green promenade and future flood protection

As part of the Flanders-wide Sigma plan – aimed at offering more spaces to the tidal river by controlled flood areas while protecting urbanised areas to the predicted sea-level rise – the dikes along the Scheldt river are being raised, thereby preventing storm tides and at the same time offering a wide array of opportunities; the city will now use the river banks to create a 6 km long climate-resilient park by engaging citizens and local stakeholders in the design process. The city of Antwerp selected the redevelopment of one area along the river bank specifically – **Sint-Anneke Plage** – as its BEGIN pilot project for further development of the river banks.



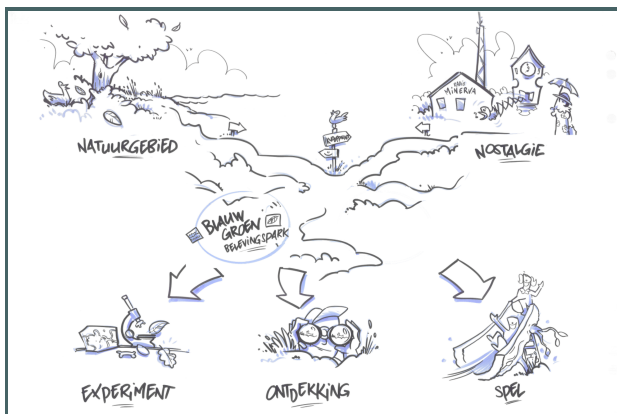
Simulation image of Sint-Anneke Plage according to the master plan

The city set up an urban living lab for this pilot project to co-creatively work on innovative solutions and bring together stakeholders with different perspectives. During a 5-day Design Sprint and Deep Dive, the city of Antwerp involved stakeholders in the design process, such as local landowners, NGOs, local residents and businesses, external experts, and universities, which provided local knowledge and stimulated creative outcomes.



Photo: Antwerp's urban living lab by ©FrederikBeyens

With the lab, Antwerp not only created enthusiasm and the will to start acting but also put the issue of climate change firmly on the agenda. The lab led to a better understanding amongst the different parties involved and a focused ambition for the area: a junction of recreation, nostalgia and a blue-green area that leads you to discover the adjacent natural areas.



Getting creative during the 5-day Design Sprint



Getting creative during the 5-day Design Sprint

Future plans for the city

- 🕒 Upscaling: a 6 km long park at the left riverbank of the Scheldt
- 🕒 Antwerpen 'breekt uit': a city-wide campaign in which the city together with citizens will future-proof streets and squares against flooding, drought and heat stress.
- 🕒 Water and green plans are being enrolled in each neighbourhood
- 🕒 River masterplan for the district of Ekeren
- 🕒 Green blue network for the development of *Ter Beke* - a sustainable business park

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Antwerp's story shows that BGI requires multi-departmental and multi-stakeholder collaborations. For further information read the **BEGIN Policy Brief** at: baxcompany.com/begin-policy-brief/