





## Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

## GreenQuays-Urban River Regeneration through Nature Inclusive Quays

Region Europe and Central Asia
Award Scheme Guangzhou Award
Themes Climate Change

Environmental Resilience Water & Sanitation

Sustainable Development Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 13 - Take urgent action to combat climate change and its impacts

Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land

degradation and halt biodiversity loss

New Urban Agenda Environmentally Sustainable and Resilient Urban Development

Commitments

## **Summary**

Breda is a municipality in the Netherlands with 185,000 inhabitants. As in many cities and towns, Breda houses rivers and creeks, often constrained in concrete, deep walls and lacking green areas. Breda's initiative 'GreenQuays' addresses current challenges, such as unsustainable urbanization, degradation of urban ecosystems, and lack of resilience to climate change.

## **Background and Objective**

Breda is planning nature inclusive green quays linked to public green spaces as part of a bigger scheme targeting the urban restoration of the river Mark. This initiative is centred on an innovative Nature Inclusive Quay (NIQ) technology that is specifically designed to support the development of a complex vertical ecosystem, providing favourable conditions for flora and fauna. Newly developed materials (type of brick stone) and innovative technical implementation approach (including different quay angles, protruding bricks, backspace, platform for riparian plants, shelters for macro fauna, specific rainwater runoffs) shall replace traditional concrete walls and extend below the parallel walkway or street, allowing trees and bushes to grow their roots and local flora and fauna to prosper. Thus, Green Quays will test a complex set of transferable and innovative solutions for renaturing urban rivers in dense downtown areas, where there is insufficient space for developing natural riverbanks. This technical solution is supported by social innovation, through applying an intensive participatory co-design process, targeting the engagement of external stakeholders and citizens. The TC recommends this initiative for several reasons: 1. Combination of technical innovation and new planning approaches – the City together with a local university have developed a new building material which is applicable in underused city spaces. 2. Positive impacts for ecosystems and citizens – everybody walking and cycling along can enjoy additional green space while ecosystems can develop. 3. Easy to extend and replicate – many cities and towns manage small rivers, canals and creeks, they can easily and affordably take up this initiative and scale it up. 4. Wider approach to new mobility solutions – the initiative not only improves the zone along streaming water, it also includes the redesign of streets (smaller), crossing (safer) and enlarges public space for walking and cycling. 5. Broad partnership – 2 universities, small companies a