THE *GREAT BUBBLE BARRIER*
TO FIGHT AGAINST PLASTIC POLLUTION IN THE NETHERLANDS

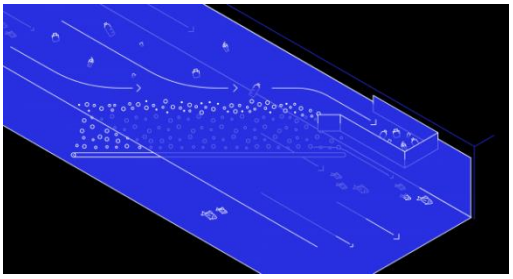
June 2026

The Great Bubble Barrier website published an article informing that in August 2025 the City of Amsterdan celebrated the impactful success of the innovative system. The system's monitoring released data showing that since its launch in 2019, the Bubble Barrier Amsterdam has successfully intercepted more than 1,000,000 pieces of plastic from the city's waterways, marking a major milestone in the fight against plastic pollution.

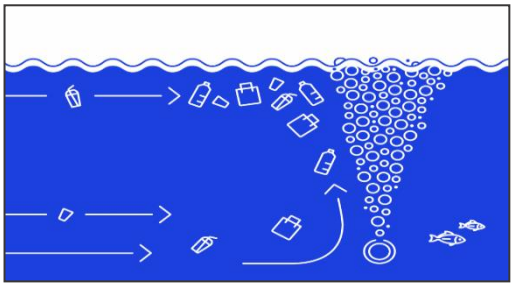
The innovative technology, developed and implemented in the Netherlands was the world's first long-term Bubble Barrier to catch plastic pollution in waterways. Located at the Westerdok, one of the historic canals of Amsterdam, the system prevents waste from flowing into the North Sea.

The Bubble Barrier was commissioned by the Gemeente Amsterdam and Waterschap Amstel, Gooi en Vecht and the system is powered by renewable energy from the city of Amsterdam.

To monitor the success and impact of the Bubble Barrier's catch, a research alliance with the Plastic Soup Foundation and Waternet was formed. Over one year, in 2024 a total of 38,178 pieces of dried, inorganic waste were monitored and categorised using the OSPAR method. Results showed that the Bubble Barrier collects around 15,536 pieces of plastic waste, or 80 kg every month. These results prompted the city to declare the pilot project a success and to hope that there will be opportunities for expansion in the future.



The Bubble Barrier technology has been developed by a startup company, co-founded in the Netherlands by Francis Zoet, Anne Marieke Eveleens and Philip Ehrhorn, with the aim of contributing to the removal of plastic from the canals and reducing the global problem of ocean pollution. Each year, up to 80% of the 8 million tonnes of plastic reaching the ocean first flows along the rivers and canals. Plastic particles are found everywhere in nature, including in fish and drinking water, and are harmful to people, animals and the environment.



Committed to this great challenge and starting from the idea that pumping air through a tube with holes installed on the riverbed would create a wall of bubbles that pushes plastic to the surface where it can be readily collected, the start-up company has designed the system as a solution applicable in canals and rivers in many different contexts. Starting in 2016, the company created a first 10-m prototype of the Bubble Barrier and, later in the year, they successfully installed pilot systems. Since 2019 the first Great Bubble Barrier ® system has been operating in the Westerdok canal in Amsterdam. The bubble barrier catches plastic over the full width and depth of rivers and prevents it from ending up in the ocean.

The Bubble Barrier ® system comprises three main components: the bubble curtain, the compressor, and the catchment system. The three components are designed to work together to create the optimum solution for each location. The bubble curtain operates by pumping air through a perforated tube on the bottom of the waterway. The bubble curtain creates an upward current which directs plastic to the surface. By placing the Bubble Barrier diagonally across the river, the natural flow of the water will push the plastic waste to the side and into the catchment system. The catchment system is designed to work in harmony with the bubble curtain to collect and retain plastics. Following collection, plastics will be removed for processing and reuse.

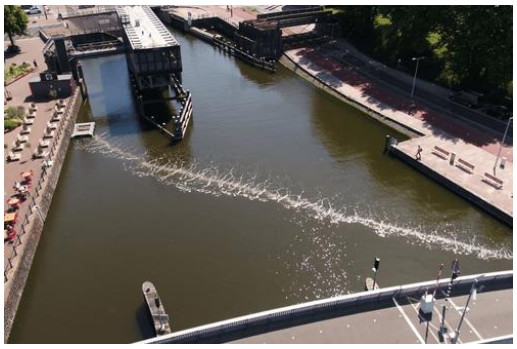
The Bubble Barrier is a curtain of air bubbles which is created by pumping compressed air through a perforated tube placed on the bottom of the canal. It does not only stop floating plastic but also brings plastic in suspension to the surface. The Bubble Barrier works 24 hours a day, 7 days a week, does not interfere with shipping or the passing of wildlife and can be deployed across the entire width of rivers or canals.

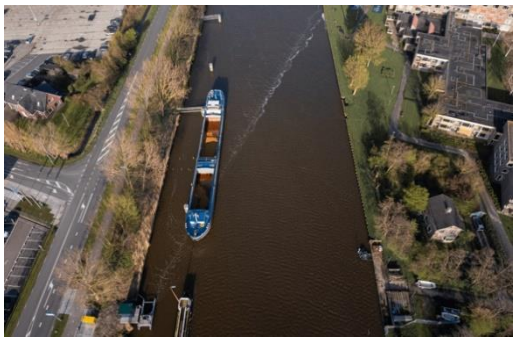
This system can be used in any river anywhere in the world to reduce plastic pollution and the Great Bubble Barrier® start-up company is engaged in the search for new partners and sponsors to apply its innovative technology.

For example, in 2021 the Bubble Barrier system was implemented as part of the Maelstrom Marine Litter Sustainable Removal and Management, a European Union funded project designed to develop sustainable technological solutions for the removal and treatment of litter within river ecosystems, intercepting litter before it enters the sea. In 2023 the Bubble Barrier was implemented as a pilot for the EU project MAELSTROM in the municipality of Vila do Conde in Portugal. In 2024, the startup also implemented a new Bubble Barrier in Harlingen, Friesland in the north of the Netherlands, where the system prevents plastic pollution from flowing into the UNESCO-protected Wadden Sea. The Great Bubble Barrier website informs about all the projects carried out in different contexts to implement this innovative technology.

In 2025 the Great Bubble Barrier was selected as a finalist, out of 7,761 submissions, for the Zayed Sustainability Prize 2026 in the Water category, being recognised for its innovative work in tackling plastic pollution in waterways. The innovative technology adopted and the results achieved by the Great Bubble Barrier have been widely disseminated by international organizations and initiatives specialized in environmental issues through articles.

According to the authors of this innovative system, the success of the Bubble Barrier in the Westerdok of Amsterdam gives hope that more Bubble Barriers will be planned to remove plastic from the canals in the Netherlands and in other countries.





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[Great Bubble Barrier Press release]

[Great Bubble Barrier in Plastic Smart Cities website]

[Great Bubble Barrier in UNESCO Green Citizens Initiative]

[Article in weforum.org]

[Article and video in CNN]

[Article in allsustainablesolutions.com]

[Video in Eco India]

[Bubble Barrier in dutchwatersector.com website]

[Bubble Barrier in Heroes of the Sea website]

[Great Bubble Barrier finalist 2022 Earthshot Prize]