Six Proven Tech Solutions to Prevent Ocean Plastic Pollution



Microfibers are the <u>most prevalent form</u> of plastic pollution in the environment. Providing residents and/or apartment buildings, laundromats and other facilities with after-market filters can make a big difference. University of Toronto lab tests have shown that filters reduce the amount of microfibers entering wastewater by ~90%. Learn more <u>here</u>.

Scientists are finding microplastics in tap water, meaning they are entering our bodies as well as our environment. Filtering our water using reverse osmosis (RO) filters on taps can reduce the amount of microplastics we ingest and that escape into the environment.

Washing Machine Filters



<u>Trash travels</u> from streets to aquatic ecosystems via storm drains. Installing devices such as LittaTraps in storm drains can prevent both macro- and microplastics from entering our waterways.

Reverse Osmosis Filters



Rain gardens and other types of bioretention systems can beautifully and effectively filter rain water and capture microplastics before they enter storm drains. <u>Research shows</u> that rain gardens trap 90% of the microplastics entering storm drains.

Storm Drain LittaTraps



Placed at a river mouth or in marinas, <u>Seabins can trap</u> <u>thousands of pieces of litter</u>, including small pellets and fragments, in under 24 hours.

Rain Gardens



Trash wheels can effectively capture waterborne plastic pollution before it enters the ocean. <u>Mr. Trash Wheel</u> has captured more than 1,400 tons of debris from Baltimore Harbor in the U.S. state of Maryland, including more than 11 million cigarette butts and 1 million plastic bottles.

Seabins

Trash Wheels

Led by Ocean Conservancy, Global Resilient Cities Network and The Circulate Initiative, the Urban Ocean program engages cities in the fight for clean, healthy seas. The platform works with leaders from city governments, academia, civil society and the private sector to develop best practices for embedding the reduction of plastic waste into other core city priorities like public health, economic growth and job creation.



This document was created in collaboration with Dr. Chelsea Rochman, Assistant Professor at the <u>University of Toronto</u> and a science advisor to <u>Ocean Conservancy</u>.