

WORKABLE SOLUTIONS FOR MARINE LITTER

The American Chemistry Council and its members agree that plastics don't belong in our oceans and waterways. We stand with those scientists and policy makers who have found that effective solutions require actions to increase litter prevention, improve waste management infrastructure, and develop strong regional and international partnerships.



WHERE DOES MARINE LITTER COME FROM?

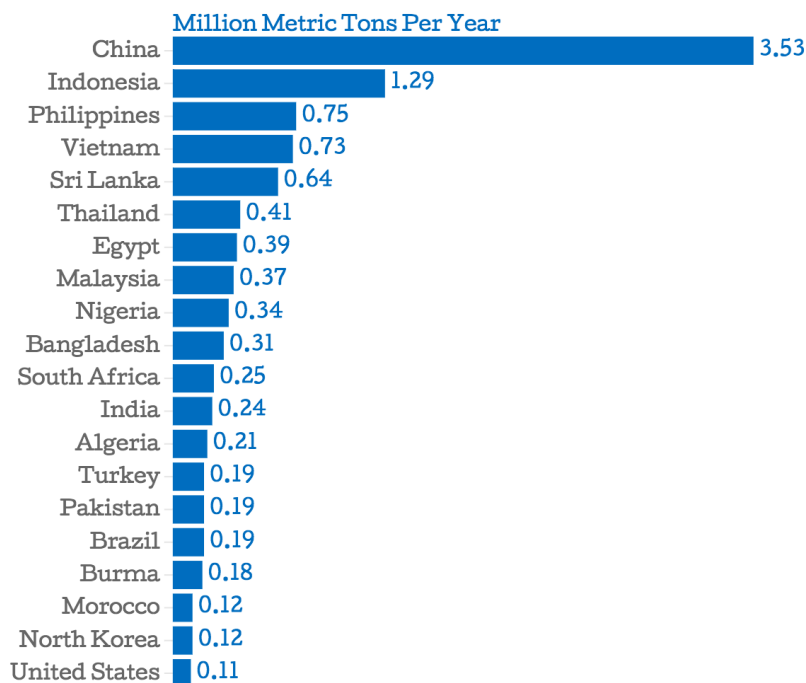
The majority of marine litter originates on land either as unmanaged waste or as street litter that ends up in nearby waterways.

A recent study by Science by *Jambeck et al (2015)*¹ estimates the input of plastic waste from land to ocean.

Key findings:

- The amount of plastic waste entering the ocean from land each year exceeds 4.8 million metric tons (MMT) and may be as high as 12.7 MMT.
- 20 countries account for 83% of the mismanaged plastic waste available to enter the ocean. The largest sources are rapidly developing countries, mainly in Asia, whose waste management infrastructure has not kept pace with their growing consumption of waste producing consumer goods.

PLASTIC DEBRIS ENTERING WORLD OCEANS (EST.)



Chartbuilder

Data: Jenna R. Jambeck et. al.

¹Plastic waste inputs from land into the ocean, Science, 13 Feb 2015: Vol. 347, Issue 6223, pp. 768-771

WHAT SHOULD BE DONE TO KEEP PLASTIC LITTER OUT OF THE OCEANS?

A number of scientific studies have concluded that plastic litter in the ocean is the result of poor or insufficient waste management and lack of sufficient recycling and recovery facilities. Working in partnership, industry, NGOs, national governments, and the United Nations have determined that good prevention and waste management are the keys to keeping used plastics out of our oceans.

As a signature initiative of its Trash Free Seas Alliance®, Ocean Conservancy worked with the McKinsey Center for Business & Environment to lead a comprehensive study, *Stemming the Tide: Land-Based Strategies for a Plastic-Free Ocean*. The report identifies solutions for reducing plastic inputs to the ocean and recommends a program for global action to solve the problem. Here are some of the study's major recommendations:

- Close leakage points within local collection systems by optimizing transport systems to eliminate illegal dumping
- Close or improve dump sites located near waterways, and increase waste collection rates by offering expanded services
- Keep leakage points closed by increasing the value of waste, and manually sort waste in rural areas to extract high value plastic waste for recycling
- Convert non-recycled waste into fuel
- Deploy a mix of waste-to-fuel or waste-to-electricity technologies in cities

Solid waste planning objectives must leverage the waste management hierarchy², which emphasizes waste reduction and reuse followed by recycling and energy recovery. Learning to view post-use materials as resources for manufacturing and renewable energy will help keep valuable materials out of waterways and landfills and in productive economic use.

²Guidelines for National Waste Management Strategies, United Nations Environment Programme, 2013

PLASTICS MAKERS IN ACTION

Through the American Chemistry Council, America's plastics makers™ helped lead the development of the industry's *Global Declaration on Solutions for Marine Litter*, which has been signed by more than 64 plastics associations in 34 countries.

Currently, nearly 260 projects focused on researching, preventing, or reducing marine debris are underway around the globe. This represents a 165 percent increase in the number of projects since the Declaration announcement in 2011. Projects vary widely, from beach clean-ups to global research to education campaigns.

Reducing marine litter requires the collaboration of governments, non-governmental organizations, researchers, industry, and other stakeholders. Plastics makers partner with NGOs and other public and private sector actors to develop and pilot systemic interventions that focus resources where they can have the most immediate and significant impact – regions and economies where the most waste enters the ocean. Solutions to this important problem must include reduction, reuse, increased recycling, tough litter abatement laws, and well-run municipal waste management systems.

For more on our work visit www.marinelittersolutions.com/US