



PCAFA Express

Providing streamlined and updated account on PCAF and its Advisory Special Bodies' resolutions and policy studies

MARINE PLASTIC POLLUTION: Ocean's biggest threat, a silent killer



Some of marine species such as fish (top photo), and sea bird (bottom) die due to marine plastic debris floating in our seas and oceans (left photo).
(all photos are downloaded from Google)

Plastic Pollution: The Problem

We are turning our beautiful oceans into a giant plastic soup. Our plastic addiction and waste mismanagement is condemning countless marine birds and animals to death by entanglement or poisoning and even leading to chemical contamination of the fish we eat.

Litter in the environment is an ongoing problem, but one of the most pressing environmental challenges we are facing today is marine plastic debris.

There are two common origins of marine debris. The land-based debris includes litter from beachgoers that has blown into the ocean or been washed in with storm water runoff while ocean-based marine debris includes

garbage disposed at sea by boats and ships such as plastic strapping from bait boxes, discarded fishing line or nets, and derelict fishing gear.

Land-based sources comprise a staggering 80% of marine debris while ocean-based constitutes the remaining 20% of all marine debris.

Plastic Pollution: Facts & Figures

According to a report released by Worldwatch Institute in 2015:

*About **10-20 million tons** of plastic ends up in our oceans every year.

***200 thousand tons** of litter and **5.25 trillion tons** of plastic particles are estimated to be floating in the Earth's ocean.

*An estimated **\$13 billion** dollars of losses per year are

associated with marine plastic debris due to the negative impact on marine ecosystems.

*The American or European person typically uses **100 kg of plastics** every year, while Asians use an average of **20 kg per person**.

***300 million tons** of plastic is produced globally every year, according to the Plastic Ocean report. **50% of that plastic** is used for disposable items that will only be used once.

*Plastics and polystyrene foam (styrofoam) comprise **90% of all marine debris**, with single use food and beverage containers as one of the most common items found in the ocean and coastal areas.

*A 2001 survey conducted by Captain Moore, found an **average of 334,271 tiny bits of plastic for every square kilometer**. The recovered plastic **weighed approximately six times more than plankton netted** in the same survey.

The Ocean Conservancy's International Coastal Cleanup 2017 Report indicated:

*plastic bottles collected during the 2016 International Coastal Cleanup if stacked would stand **372 times higher** than Dubai's towering Burj Khalifa (**828 meters high**);

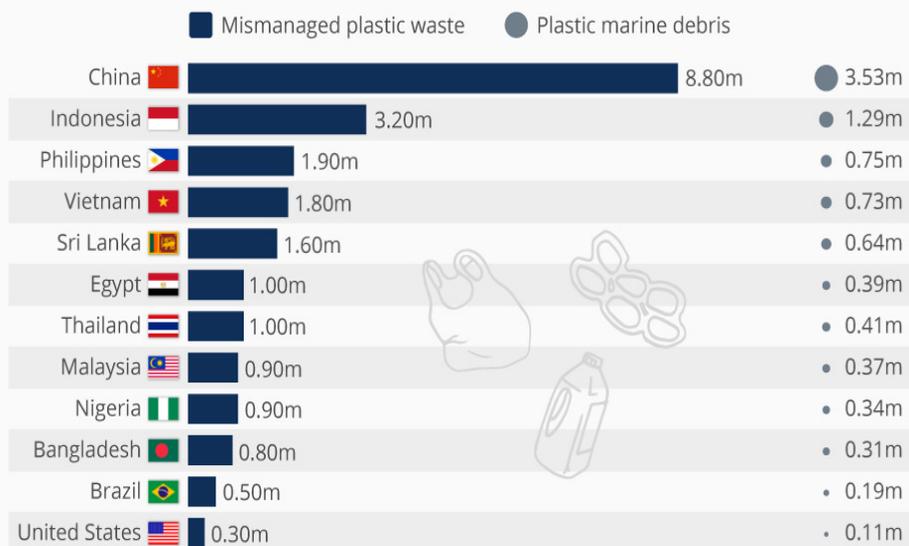
*all the plastic straws collected off beaches around the world would have stood **145 times higher** than the One World Trade Center in New York City (**541 meters**);

*all the plastic utensils collected would have stood **82 times higher** than the Kuala Lumpur's Petronas Towers (**452 meters**), and

*all the cigarette lighters collected would have stood **10 times higher** than the Eiffel Tower in Paris (**324 meters**).

The Countries Polluting The Oceans The Most

Annual metric tons of mismanaged plastic waste and total amount ending up in global waters*



* Generated in 2010 (selected countries)
@StatistaCharts Source: The Wall Street Journal

statista

Graph shows top countries disposing marine plastic debris in our oceans in 2010

How can we solve plastic pollution?

Here are the recommendations:

1. Eliminating Plastic at Source

a. To switch from plastic polystyrene packaging to environmentally friendly alternatives, i.e. compostable plant fiber packaging made from natural materials.

b. Consumers should be proactive and opt for reusable and/or refillable containers rather than disposable packaging wherever possible – save money and benefit the environment.

c. Implement a stricter legislation on the use of plastic shopping bags, with some banning them outright.

2. Plastic Recycling Initiatives

Because it is so tough and durable, plastic can be reused or it can be recycled. Philanthropist, environmental advocate, and entrepreneur, Richard Branson, has proposed that we implement a deposit refund system for plastic bottles.

3. Beach Cleanups

Every year, the Ocean Conservancy coordinates the International Coastal Cleanup in collaboration with environmental organizations, schools and other community initiatives around the world, encouraging volunteers to take part in local beach cleanups to

rid the environment of trash. This can be stepped up at a local level, where individuals, communities and organizations can get more actively involved in cleaning up their local beaches to help keep them free of plastic and other debris.

4. Ocean Cleanup Innovations

Some innovative individuals have proposed other solutions for removing plastic from our oceans, including deploying large floating booms to trap and catch plastic designed by a Dutch entrepreneur when he was still a teenager, and floating sea bins designed by two surfers that can be used to remove plastic from harbors, for example.

5. Improve waste collection/management. Governments to take leadership in environmental policy to cooperate and tackle this global scourge and ACT NOW!

6. Some governments have incorporated **education about plastics, waste management and recycling** into their school curriculums.

7. Reducing barriers to financing better waste management of the plastic waste entering the ocean is an essential immediate measure that must be met.

How long does plastic breaks down in the ocean?

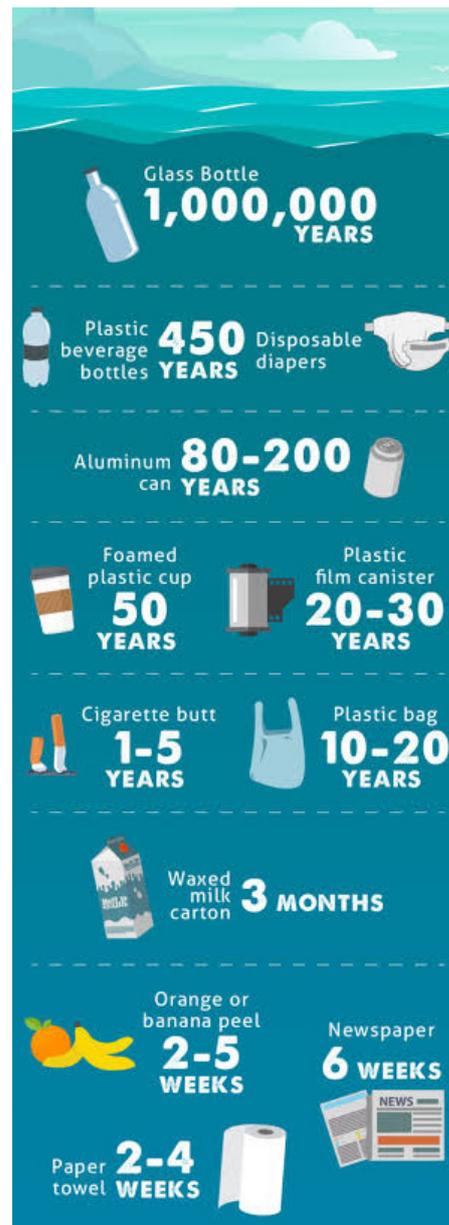


Photo courtesy of SAFETY4SEA, downloaded from Google.com

The challenge is to
ACT NOW BEFORE IT IS TOO LATE

“Even if you don’t live near the ocean, the chances are your plastic garbage has found its way to the sea”

DR. SYLVIA EARLE
Marine Biologist & Explorer

The content of this Knowledge Product was presented during the 2nd PCAF ASBs’ Women Summit