

Plastic means prosperity ... but we are throwing away far too much of it

Plastic is great. Not only is it lightweight, it is also highly durable, versatile and cheap to manufacture. Growing demand for plastic products is usually matched with decreasing poverty, rising income and better quality of life.

Indeed, plastic has revolutionised our society and the environment. So much so that we can see plastic wherever we look – at our home, our office, on the streets, country parks, beaches, in the ocean and inside the guts of birds and sea animals.

The global production and consumption of plastics have been rising for more than 50 years. In 2013, we produced 299 million tonnes of plastic – China alone represents almost one-fourth of the market.

The disposable nature of plastic products means that we throw out just as much as we create. A 2015 study calculated that we generated 275 million tonnes of plastic waste in 2010, with anywhere from 4.8 to 12.7 million tonnes of that entering the ocean.

Where do ocean plastics go? Some gets washed back up to coastlines – such as Lap Sap Wan, a remote bay near Cape D' Aguilar. A survey found that 89% of 185 tonnes of litter in the bay was plastic. Others are trapped by rotating ocean currents known as gyres.

One of the most famous examples is the Great Pacific garbage patch, located in the North Pacific Gyre. Plastic will break down into smaller pieces, but never fully degrade. It is estimated that the Great Pacific garbage patch has around 7 to 16 trillion pieces of microplastic, weighing altogether between 63 and 155 thousand tonnes.

As much as 35% of fish in the garbage patches and almost 90% of seabirds have consumed plastic in their lives. Ingesting plastic waste can cause injury, choking, intestinal blockage, starvation and even death. Toxic additives and toxins absorbed by the plastic also bioaccumulate in animals and pass along the food chain, so they can end up back on our plates and in our bodies.

So what can we, as Hong Kong citizens, do? A number of organisations, academics and individuals have recently joined to form the Hong Kong Marine Pollution Working Group. As part of its solution, the group has petitioned the government and legislators sitting on

the Panel on Environmental Affairs to implement a plastic bottle deposit programme a month ago.

Why plastic bottles? Because they are one of the most prolific wastes and the number one contributor to marine litter in Hong Kong. Just 10% of the city's plastic waste was recovered in 2015; boosting our recycling rates is the key to combating marine litter.

And deposit programmes can do just that – as demonstrated by cities in Germany, Canada and more around the world. A well-structured deposit programme incentivises the public to return pre-sorted, pure material to facilitate the recovery and reduction of plastics from the waste stream.

At the end of the day, the best solution is to just stop using disposable bottles. Bring your own refillable bottle and use a drinking fountain or water dispenser.

Wendell Chan, Project officer at Friends of the Earth (HK).

1 April 2017

Hong Kong Free Press