



# How much plastic do we use?

## Background reading for teachers

This reading gives you the background for each slide, with sources you can check.

### Plastic use in the Philippines

GAIA's 2019 waste assessment estimated that Filipinos use more than 163 million plastic sachets, 48 million shopping bags and 45 million thin film bags every day.<sup>1</sup>

### The Great Pacific Garbage Patch

A 2018 study using ship and aircraft surveys estimated at least 79,000 tonnes of ocean plastic floating in an area of 1.6 million square kilometres between California and Hawaii. More than three quarters of the mass was debris larger than 5 cm, and at least 46% was fishing nets. Microplastics made up 8% of the mass but 94% of the estimated 1.8 trillion pieces.<sup>2</sup> The Philippines' land area is about 300,000 square kilometres, so the patch is more than five times larger.

### The rubber ducks

In January 1992, a container of about 29,000 plastic bath toys was lost in the North Pacific. Oceanographer Curtis Ebbesmeyer tracked where they washed up to study ocean currents.<sup>3</sup>

### Recycling

Only about 9% of plastic waste is recycled worldwide.<sup>4</sup> That is why the waste hierarchy puts refusing and reducing first.

### Sources

1. GAIA (2019). Plastics Exposed. [no-burn.org](http://no-burn.org)
2. Lebreton, L. and others (2018). Evidence that the Great Pacific Garbage Patch is rapidly accumulating plastic. *Scientific Reports* 8: 4666.
3. Ebbesmeyer, C. and Scigliano, E. (2009). *Flotsametrics and the Floating World*. HarperCollins.
4. OECD (2022). *Global Plastics Outlook*.

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