Top 10 Reasons to Reduce Plastic Production

Ö

- 1 An estimated 8 million metric tons (17.6 billion pounds) of plastic enters the ocean every year (Jambeck et al. 2015). This is roughly equivalent to dumping a garbage truck-full of plastic into the ocean every minute.
- 2 Plastic waste is everywhere. It has been found floating on the sea surface, washing up on the world's most remote coastlines (Lavers et al. 2017), melting out of Arctic sea ice (Peeken et al. 2018) and sitting at the deepest point of the ocean floor (Chiba et al. 2018).
- Tens of thousands of individual marine organisms have been observed suffering from entanglement or ingestion of plastic (Gall et al. 2015).
- 4 Experts estimate that 90% of seabird species have ingested plastic, the result of which can be death (Wilcox et al. 2015). Approximately 50% of the world's sea turtles have ingested plastic debris (Schuyler et al. 2013).
- 5 Plastics are profoundly flawed by design: They use a material made to last forever but designed to be thrown away.
- 6 Plastics never go away. Instead, they break down into smaller and smaller pieces, which act as magnets for harmful pollutants (NOAA 2018). When eaten by fish, some of those contaminated microplastics work their way up the food chain and into our food supply (Hermabessiere et al. 2017; Rochman et al. 2013; Rochman et al. 2015). Everything from salt to honey to beer has been found to contain microplastics (Liebezeit & Liebezeit 2014; Liebezeit & Liebezeit 2013; Karami et al. 2017).

- Plastic is impacting human health through every single stage of its life cycle, from extraction and production to consumer use. It is making its way into our food, water and air (CIEL et al. 2019). Scientists continue to study what our plastic diet may be doing to our bodies.
- 8 Unfortunately, one of the most popular solutions to plastic pollution falls short. Of the plastic waste generated, only about 9% has been recycled. 12% was incinerated and 79% accumulated in landfills, on the ground or in the ocean (Geyer et al. 2017).
- **9** As of 2015, approximately 8.3 billion metric tons of plastic had been produced, of which 6.3 billion metric tons became plastic waste (Geyer et al. 2017). Over the next 10 years, plastic production is expected to increase by 40% (The Guardian 2017).
- Wealthier nations like the U.S. are sending plastic waste to developing countries with less-robust waste management systems. China has imported a cumulative 45% of plastic waste since 1992. However, starting January 1, 2018, China permanently banned the import of nonindustrial plastic waste. This has resulted in plastic waste backing up or being sent straight to landfills. Some recyclables are still being exported to other countries with less-established waste infrastructures (Brooks et al. 2018).

