- An analysis of 2016 data estimates that approximately 11 million metric tons of plastic pollution enters the ocean every year (SOURCE: Pew/Systemiq). This represents more than a garbage truck's worth of plastics entering the ocean every minute (SOURCE: Ocean Conservancy estimate).
- It is estimated that between 24 and 35 million metric tons of plastics entered aquatic ecosystems (both freshwater and marine environments) in 2020 (SOURCE: Science).
- Plastic pollution inputs into rivers, lakes and the ocean could increase to as much as 53 million metric tons annually by 2030 even if current reduction commitments are met (SOURCE: Science). This is equivalent to about one cargo ship's worth of plastics, by weight, entering aquatic ecosystems every single day (SOURCE: Ocean Conservancy).
- Plastic has been found in every corner of the ocean, from the deepest trench (SOURCE: CNN) to the most remote Arctic ice (SOURCE: Reuters). Plastics have also entered the atmosphere (SOURCE: NPR).
- Two of the most widely-produced plastic polymers in the world are polyethylene (PE) and polypropylene (PP); unfortunately, PE and PP are also some of the most commonly encountered plastics in the ocean (SOURCE: Science Advances).
- To date, nearly 1,600 species have been reported to ingest plastics, with roughly 1,300 of those being ocean-dwellers (SOURCE: Science).
- Thread-like microplastics, called microfibers, are produced from synthetic textiles shedding or abrading, but can also be formed when larger items containing fibrous plastic materials like cigarette filters break down (SOURCES: PLOS ONE; Science of the Total Environment).
- Microfibers are the most prevalent category of microplastics ingested by marine fishes, crustaceans, and bivalves, typically representing more than 90% of plastics ingested (SOURCE: Marine Pollution Bulletin). Ingestion of microplastic fragments, films, and pellets by fish have also been observed but typically represent a smaller proportion than fibers (SOURCE:
- A review paper of research published in 2019-2020 found that 60% of fish studied globally contained microplastics, and carnivorous fish had more microplastics than omnivores (SOURCE: Marine Pollution Bulletin).
- A recent study estimated children take in roughly 550 microplastics per day and adults take in 880 per day through breathing as well as consumption of eight food and beverage types (including fish, mollusks, tap water, bottled water, and milk) (SOURCE: Environmental Science & Technology). Microplastics have also been found in numerous other foods and beverages such as beer, honey, and salt (SOURCE: Environmental Science & Technology).
- Ocean plastic pollution costs the global economy an estimated $2.5 trillion annually (SOURCE: Marine Pollution Bulletin).
- Volunteers with Ocean Conservancy's International Coastal Cleanup collect millions of pounds of trash – mostly plastics – from beaches and waterways around the world ever year, in a single day. Common items include cigarette butts (which contain plastic filters), plastic bags, plastic beverage bottles, plastic bottle caps, straws and stirrers, plastic lids, plastic/foam take-out containers, and plastic cutlery (SOURCE: Ocean Conservancy).
- A 2020 study investigating plastic-related deaths across 80 cetacean (e.g. dolphins and whales), pinniped (e.g. seals and walruses), sea turtle, and seabird species found flexible plastics are responsible for the largest proportion of debris-related deaths; other highly lethal items include plastic bags/sheets/packaging, rope/fishing nets, fishing tackle and balloons (SOURCE: Conservation Letters).