



The humpback whale is found in all of the world's oceans. Marine animals are increasingly affected by pollution, climate change, and underwater noise.

Action is needed on numerous fronts

Plastic and other forms of waste are widespread in the world's oceans. To confront this threat to marine life and human health, we need to address every stage of the plastic lifecycle – from production and distribution to consumption, disposal, and recycling.

Reduce, re-use, and recycle

The production and consumption of plastic packaging – including in particular single-use plastics – is too high and continues to rise. We need to enhance the recyclability of many products and packaging types while prohibiting the use of toxic additives. Against this backdrop, we should strive to reduce the consumption of packaging material while also expanding reliance on reusable packaging and, whenever possible, bio-based alternatives.

Enhance product responsibility

In many countries, it is still unusual for companies that place packaged goods onto the market to contribute to waste disposal costs. Revenues from a special levy on companies can be used to establish dedicated plastic-waste collection systems. Extended producer responsibility, or EPR for short, is an important principle for encouraging closed material loops.

Enable eco-conscious consumer decisions

Disposable products should increasingly become a thing of the past. Reusable packaging systems should become the norm in retail, hospitality, and event management. Consumers should have the choice of paying a deposit for reusable containers or using their own containers when purchasing food and beverages. As long as the customer's container is clean, there is no reason for businesses to refuse it.

Ensure implementation of existing rules

In 2023 Germany adopted national legislation designed to promote reusable packaging systems. This legislation requires restaurants and eateries to offer reusable takeaway containers for food and drinks. However, adherence needs to be more closely monitored and sanctions imposed in the event of non-compliance.



Reusable packaging systems help to protect the environment and reduce resource consumption. After an average of 10 to 25 uses, reusable takeaway packaging has a better eco-balance than disposable packaging.

Move from linear to circular systems

Fundamental transformation is needed: linear consumption and waste disposal systems should be replaced by circular processes that provide for active waste reduction, effective waste separation, genuine recycling, and the composting of organic waste.

WWF is on the job

Putting a stop to plastic pollution

At the UN negotiations for a binding international agreement on plastic pollution, WWF has been advocating for a treaty that commits countries to reducing the volume of waste entering the environment. WWF is actively working in countries where the highest amounts of plastic waste enter the oceans. In a WWF project in Vietnam's Mekong Delta, for instance, 8,250 households now separate plastic and other recyclables for collection, thus reducing the volume of plastic packaging that ends up in the environment, including the ocean. In another WWF project, hotels on the tourist island of Phu Quoc in the Gulf of Thailand have committed themselves to phasing out single-use packaging. WWF has also been sponsoring various clean-up operations, including regular plastic-waste removal from endangered coral reefs.

Promoting reusable packaging system

To prevent plastic waste from accumulating and polluting oceans, WWF supports the development and adoption of reusable packaging systems in sectors such as hospitality, hotels, and retail. WWF has been paving the way for the adoption of such systems through various activities, e.g. by running pilot projects for reusable packaging at events; by launching an informational website; and by engaging in political outreach.

Recovering ghost nets

In German coastal waters WWF has been working to recover 'ghost nets' – lost fishing nets in which marine animals can become entangled. In this effort WWF is being supported by the German Federal Office for the Environment and two German coastal states. WWF Germany's GhostNetZero



platform leverages artificial intelligence to analyze high-resolution sonar data from seabeds worldwide, automatically identifying potential ghost net locations. The GhostNetZero app enables divers and fishermen to verify and report ghost nets worldwide.

WWF staff member Gabriele Dederer has been working on the issue of ghost nets since 2016.

Get informed

Find out how single-use plastics and packaging waste are harming marine life and what you can do about it:



[wwf.de/plastik](https://www.wwf.de/plastik)

[wwf.de/plastikflut](https://www.wwf.de/plastikflut)

[wwf.de/ozeane-plastikmuell](https://www.wwf.de/ozeane-plastikmuell)



One-third of coral reefs in the Asia-Pacific region are already contaminated with macroplastic particles. Entire reefs are suffocating under a layer of plastic waste, making them vulnerable to disease. Coral reefs are among the most species-rich and productive ecosystems on earth. They provide a habitat for more than 25 percent of all known marine species, including fish, crustaceans, and many other organisms. These reefs help to conserve marine biodiversity by acting as nurseries for many economically important fish species.

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Why we are here

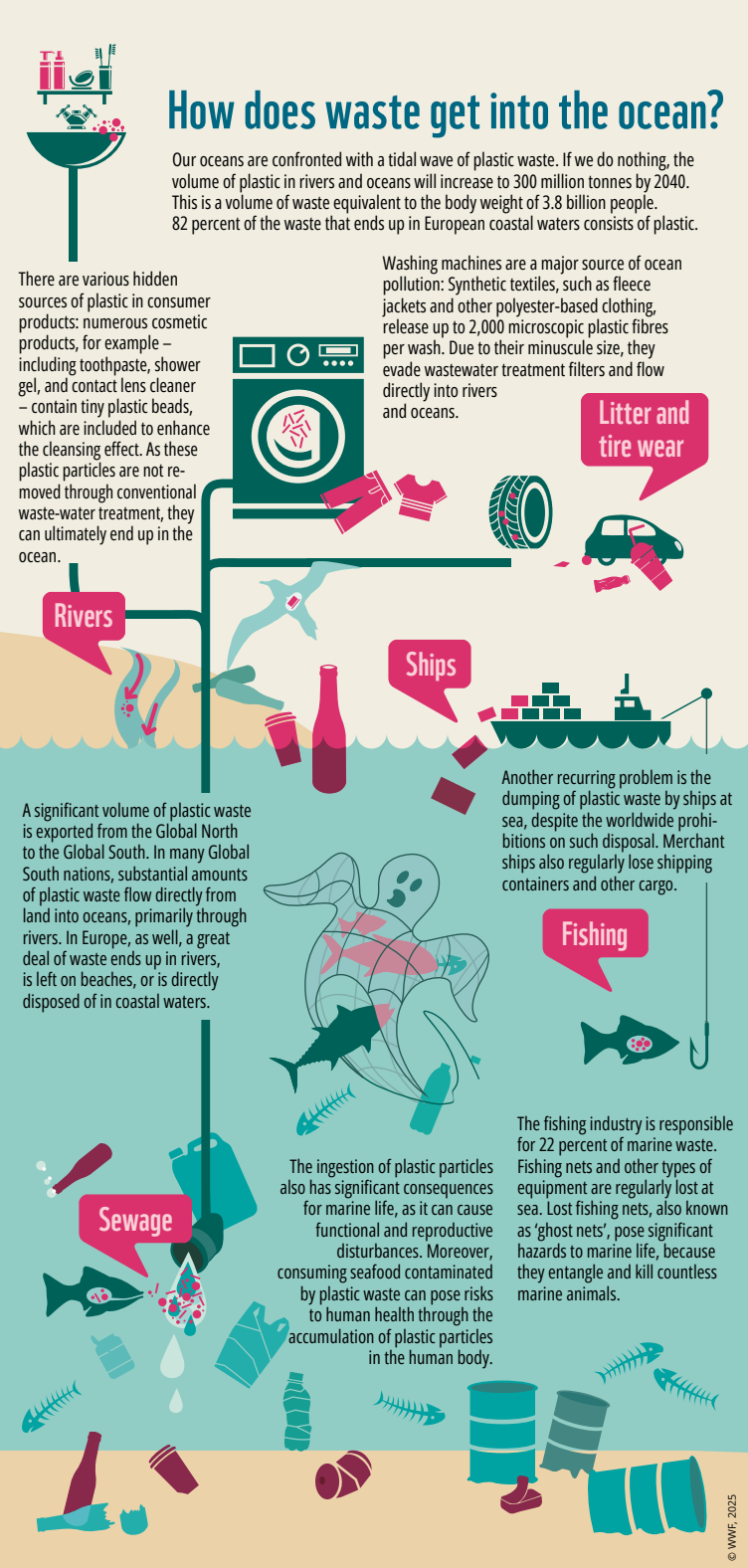
To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.



Plastic

A major threat to the world's oceans





Plastic is everywhere

Plastic products are deeply embedded in our daily lives. However, they are often used just once before being discarded – and they frequently end up in the environment, especially in the ocean. An estimated 4.8 to 12.7 million tonnes of plastic enter the oceans each year, endangering marine animals, ecosystems, and ultimately human health. The main cause is inadequate waste disposal. This is a major problem in many regions, including South-East Asia. However, Germany also bears responsibility for plastic pollution – for example, through reliance on disposable coffee cups or the export of



waste to countries with inadequate waste disposal systems. Around one-third of all plastic packaging worldwide ends up in the environment in an uncontrolled manner. Ocean currents can disperse plastic waste across vast distances. Some of this waste sinks to the ocean floor, while some washes up on beaches. The world's oceans are estimated to contain between 86 and 150 million tonnes of plastic waste.

Plastic – what is it, really?

Plastic is usually manufactured from petroleum or natural gas. Plastic is inexpensive to produce and highly versatile, as its long molecular chains can be customized to serve a variety of purposes. However, unlike natural materials, plastic decomposes extremely slowly. It can thus remain in the environment for hundreds or even thousands of years. Plastic particles smaller than five millimetres are called microplastics. Microplastics reach the ocean via different routes (see diagram at left). Plastics often contain additives designed to enhance their properties, but these substances can be harmful to both animals and humans. Bisphenol A and phthalates can impair sexual development, damage genetic material, and increase the risk of cancer. Plastic can also absorb pesticides and other toxins dissolved in seawater. These toxins can penetrate the fatty tissues of marine organisms and thus enter the food chain.

The consequences of plastic waste



Each year, over 250,000 sea turtles are accidentally caught in fishing nets and longlines.

A few shocking data points:

- Studies have found that some 52 percent of sea turtles have ingested plastic debris.
- Research conducted as early as 2015 revealed that 95 percent of stranded Antarctic petrels had plastic debris in their stomachs. The stomach contents of these birds provided scientists with clear evidence of plastic pollution in the oceans.
- Plastic debris is also repeatedly found in the stomachs of beached whales.
- In Helgoland, northern gannets are often strangled by the plastic threads they use as a nest-building material.

Plastic has become a popular nesting material for birds – but it often leads to their demise.



Today, plastic pollution is a major hazard to marine life, negatively impacting some 90 percent of studied species. Marine animals often become entangled in abandoned fishing nets, ropes, and plastic debris, leading to injury or even death. Creatures that eat plastic particles may suffer internal injuries or die from hunger with clogged intestines.

Poison in the food chain

Marine animals of all sizes eat plastic. Tiny plastic particles are absorbed by plankton (the smallest marine organism) and travel up the food chain, reaching creatures like seabirds, seals, whales, and sharks – and eventually humans. In this way, plastic waste comes full circle, ending up on the dinner tables of those who caused it.



Birds can become entangled in old fishing nets or become sick from eating plastic debris. Seals are also threatened by the plastic crisis.

Plastic threatens our ecosystems

Animal and plant species are frequently transported to other regions of the world on floating plastic debris, which act as miniature cargo ships. There, they can upset the balance of sensitive ecosystems.



Single-use plastic packaging is responsible for 60–95 percent of marine waste.

Plastic destroys sensitive habitats

When plastic bags and nets cover coral reefs, sponges, and mussel beds, they prevent sunlight and oxygen from reaching these vital ecosystems, disrupting growth and survival. Plastic waste also poses a risk to rare cold-water coral reefs.

You can help...

...to stop the tidal wave of plastic waste. Small changes can make a big difference. Avoid unnecessary disposable products and take advantage of reusable packaging systems or rely on your own reusable containers. Buy products that require little or no packaging, drink tap water, and avoid microplastics in cosmetics or cleaning products. Many products can be reused, repaired, or bought second-hand – this saves raw materials and reduces waste.

Take advantage of waste separation and recycling services; for more information, contact your municipal service provider.

When on holiday or travelling, avoid plastic whenever possible and dispose of your waste properly. This is particularly important when visiting tropical destinations that lack adequate waste management systems.

Would you like to make an even bigger impact? Get involved politically – for example, by supporting the adoption of a special tax on single-use packaging or by contributing to local waste clean-up campaigns. Together we can stop the tidal wave of plastic waste and make a real difference.

To learn more and discover opportunities for getting involved, please visit: wwwf.de/spenden-helfen

