

CIRCULAR ECONOMY: Reducing Marine Litter at its Source



KEY FACTS AND FIGURES

Marine litter consists of manufactured or processed solid materials that end up in the marine environment one way or another, either intentionally discarded or not. **It is 100% of human origin.**

Litter can be found floating on the **sea surface** (15%), in the **water column** (15%), on the **seabed** (70%) and deposited on the **coastline**, either in the form of **macro litter** or of small pieces of plastics called **microplastics**. These are either directly introduced into the marine environment as plastic microparticles, for example in cosmetics or textiles which are washed down the drain, or they result from the degradation of larger plastic items by the sun, salt and waves.

The marine litter problem is **global in scale** and **knows no boundaries**. Marine litter items range from fishing related items (nets), food and beverage packaging, smoking related items, transport packaging waste (pallets, plastic

IMPACTS OF MARINE LITTER

Marine litter is not only an aesthetic problem, it poses a major threat to marine biodiversity, with impacts recorded on approximately 700 species to date. Impacts of marine litter are multiple and affect all communities, both coastal and inland.

Impacts on marine organisms and birds

Marine animals and birds ingest plastics, become entangled, suffer injuries or even die because of marine litter. It is estimated that **100 000** marine mammals and **1 million** birds **die** every year because of marine litter. There are also sublethal effects related to the pollutants plastic absorbs from the seawater, or from chemical additives in the plastic.

Impact on the health and resilience of our seas and coast
Marine litter damages and degrades habitats, in particular the seabed where the majority of litter sinks. It also serves as a **vehicle for invasive species**.

sheeting and straps), feedstock for plastic production (pre-production pellets and powders) and sewage related debris (sanitary towels, tampons, plastic cotton bud sticks). It is composed of plastics, metals, glass, wood, construction materials, paper and cardboard, polystyrene, textiles and hazardous materials.

Around 80% of the litter we find is plastic.

Marine litter results **from activities on land (roughly 80%)** or at sea (from fishing activities and shipping, recreational activities, fixed installations such as mining and oil extraction platforms as well as aquaculture facilities). Litter originating from the land is either transported by storm water overflow drains, rivers, household sinks and toilets or blown into the sea from the land.

We, citizens, industry and governments, all contribute to marine litter. We all hold the solution in our hands.

Impact on economy and society

The total quantified **cost of marine litter in Europe** ranges from **259 m€ to 694.7 m€**, including **clean-up costs**, damage costs for the **fisheries sector**, for **tourism** and recreation activities and impact on **fishing vessels**, etc. Real costs are actually higher as studies have not been able so far to quantify, estimate and monetise all impacts.

Impacts on human health and safety

Impacts on human health and safety are multiple and include: risk of entanglement and injury, health risk resulting from degradation of the quality of marine waters or due to hazardous waste items on tourist beaches. Plastics also have the capacity to act as a sponge for harmful pollutants already present in the marine environment and are often manufactured with chemical additives, some of them endocrine disruptors. A wide variety of commercial seafood species, in particular the filter feeders have been shown to

ingest marine litter, providing a **route to the human food chain**.

CURRENT LEGISLATION AND INITIATIVES

At an international level, marine litter has been recognised as a **priority issue** by UN institutions since the 80's and in particular at the Rio +20 conference. At the G7 in 2015 leaders committed to an action plan on marine litter, and with the adoption of the UN ocean sustainable development goal (SDG 14), commitments were made to **prevent and significantly reduce marine litter by 2025**.

At European level, the major piece of legislation which concerns marine litter is the **Marine Strategy Framework Directive**. This directive includes marine litter as an **indicator for the good environmental status of marine waters to be achieved by EU Member States by 2020**. It is also an objective set in the 7th Environmental action plan of the EU. Other EU legislation intends to address both sources and impacts such as legislation on urban wastewater, pollution from ships and the waste legislation

OUR DEMANDS

While plastic production and consumption is estimated to exponentially increase, nearly 50% of plastic waste is still landfilled in the EU. At a global level, it is estimated that **15-51 trillion plastic particles are floating on the surface of Oceans** and in a business-as-usual scenario the ocean is expected to contain 1 tonne of plastic for every 3 tonnes of fish by 2025 and **by 2050 more plastics than fish** (by weight).

The Circular Economy Package has the potential to **address our unsustainable production, consumption, and poor waste management and reduce marine litter**. By reducing the production of waste, reducing consumption of single-use plastics, designing products to be repaired, durable, reused and if not, recycled into new products, and putting a consumer value on plastics through economic instruments they are less likely to be carelessly disposed of and end up in the oceans. **Biodegradable plastics are not an answer** to littering or marine litter, as these technologies do not allow these plastics to fully biodegrade in sea water.

Reducing marine litter means **huge benefits** for our societies and for the marine environment: increased resilience of our ocean biodiversity, contribution to fighting climate change, increased well-being for citizens, and

currently under review. Regional Sea Conventions are also addressing marine litter in their action plans. There is no one easy solution to marine litter and that is reflected in the wide variety of legislation that can be utilised to tackle it. **All policies must be optimised to ensure that the goal of ending the input of man-made items to the sea is realised.**

In the end, the persistent and growing issue of marine litter results from both a lack of binding legislation to address our irresponsible usage and disposal of plastics as a material, and deficiencies in the implementation and enforcement of existing regulations and standards. The EU has therefore a leading role to play and **a unique opportunity with the Circular Economy Package to address marine litter**.

economic savings for local authorities and other economic activities at sea and on the coast.

Our demands:

- ~ **Set a binding marine litter reduction target of 50% by 2025**
- ~ Introduce waste prevention targets and specific prevention measures on the top ten items found on beaches by region
- ~ Strengthen extended producer responsibility schemes
- ~ Promote prevention and reuse through economic incentives for reusable and durable products, deposit-refund schemes and penalise single-use products, non-recyclable plastics and over-packaged items
- ~ Ban the landfilling of recyclable waste, including plastics
- ~ Increase recycling targets for plastics and oblige Member States to separately collect plastics
- ~ Promote green purchasing of products and services
- ~ Ensure better enforcement, control and sanctions

References:

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- [A global inventory of small floating plastic debris](#) Van Sebille et al (2015)
- [The New Plastics Economy: Rethinking the future of plastics](#) Ellen MacArthur Foundation