



Before plastics from the sea are recycled, the waste must be systematically collected. WFO, on behalf of the industry, pays fishermen to collect this waste with trawl nets in the sea and to bring it to land. This cleans up the oceans and allows the materials to be reprocessed (© WFO)

## Becoming Part of the Solution

### *Manufacturing Industry, Processors and the Fishing Sector Are Coming Together to Recycle Plastic Waste from the Sea*

There are various approaches to tackling the global problem of plastic waste in the sea. While producers are mainly focused on preventing dumping, processors can get involved in recycling the wastes into new products. The value chain begins with collection at sea. Support for this is provided by the public-private foundation Waste Free Oceans, an initiative of the European plastics recycling and converter sector.

In February 2017, the United Nations held its Ocean Conference in Bali, Indonesia, focusing on growing global awareness of plastic litter in the oceans. Erik Solheim, Head of the UN Environmental Programme, called attention to the fact that plastic litter is depositing on the seabed at the North Pole as well as entering the food chain to end up on our plates. Similar statements were

made by politicians and well-known personalities such as the British entrepreneur Sir Richard Branson and the US actor Adrian Grenier. The Ellen MacArthur Foundation raised attention to the fact that 8 million t of plastic waste leak into our oceans every year, which is equivalent to one garbage truck dumping its load each minute. If nothing is done, there will be 1 t of plastic for every

3 t of fish by 2025, and by 2050 there will be more plastic waste in our oceans than fish.

Plastics of concern include single use plastics such as plastic packaging (e.g. plastic packets, bottles and plastic bags) and micro-plastics found in most cosmetics. Often, marine animals get tangled up or ingest harmful related substances. Clearly, the amount of plas-

tic leaking into our oceans needs to be reduced, as well as the debris present in our oceans today. The latter challenge is being tackled by the non-governmental organization Waste Free Oceans (WFO).

### Organizing the Collection and Recycling of Marine Litter

The public-private foundation WFO unites the fishing sector, the plastics industry and processors with the aim of reducing and reusing floating waste by collaborating with both fishermen and companies to transform ocean waste into new products. Fishermen collect so-called “ghost nets”, plastic bottles and other plastic wastes; recyclers sort and clean the refuse, and companies recycle the raw material in combination with other recyclates to produce a new product.

So far, ten European countries (Belgium, Holland, Spain, Turkey, Denmark, Austria, Hungary, Portugal and France) have been “fishing for litter.” Hong Kong is next in line. Waste Free Oceans is contacting national fishermen’s organizations or local NGOs

and government representatives who are initiating the cooperation with fishers. Equipped with a special trawl net (**Title figure**), fishermen can then collect 6 to 8 t of plastic waste per net during their fishing voyages. The collected plastics are then passed on to processors, who recycle the waste and use it to produce sustainable products. The costs for this are borne by the partner companies or processors, often in order to send a clear message for the responsible management of resources. Together with the detergent manufacturer Ecover, for example, the

Portuguese processor Logoplaste processed marine litter and turned it into a bottle, which attracted great media interest when it was marketed. With its network of plastics producers and recyclers, WFO can quickly and directly connect interested companies with partners. Particularly packaging producers are showing increasing interest in using recycled material. An informed and environmentally aware customer base certainly plays its part as well. Financed in part by the European Plastics Converters (EuPC) and plastics companies, Waste »

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## WFO

More information about Waste Free Oceans can be found at:

» [www.wastefreeoceans.org](http://www.wastefreeoceans.org)

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Free Oceans wants to create the decisive bridge between the plastics industry and protecting our environment, highly relevant at a time when the topic of extended producer responsibility and the circular economy are gaining ever more relevance. At the same time, the issue of marine litter must also be addressed by improved waste collection and sorting on land.

WFO works, among others, with the World Wide Fund for Nature (WWF), the UN Environment Programme and the

Diplomatic Council. WFO is currently planning the "Lesbos Lifejacket" initiative to collect the lifejackets and inflatable boats left behind by refugees in Lesbos, Greece, and recycle them into bags. Waste Free Oceans is actively searching for partners for this, who, as recyclers or reusers, want to contribute to reducing waste. The project cooperation enables plastic companies not only to take a clear stand against plastic litter in the sea, but also to play an active role in reducing it. ■

## Products from Marine Litter

Products from plastics wastes from the sea were for a long time a niche product of start-ups. Now, even large manufacturers of consumer articles and packaging are aware of this and starting up pilot projects. For example, the detergent manufacturer Ecover Belgium N.V., Malle, Belgium, uses a bottle containing 10 % plastic waste from the sea and 90 % recycled plastic. Procter & Gamble (P&G), too, announced a shampoo bottle made from up to 25 % recycled "beach plastic" early this year.



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## Five Questions to ...

**... Volker Scheel, CEO of K.D. Feddersen Holding GmbH, Hamburg, Germany, a partner company of Waste Free Oceans (WFO)**

### *How did you find out about WFO?*

One of the initiators of WFO directly approached Dirk Steinbrück, one of our two Managing Directors at Akro-Plastic GmbH, at Fakuma 2011 and presented the project to him. After further information and talks, we found the concept coherent and decided to get involved with the entire Feddersen Group. Since 2012, we have been an industrial partner of WFO making annual contributions to provide financial resources to strengthen its work.

### *There are many initiatives, NGOs and foundations focused on the issue of marine litter. Why did your company opt for WFO?*

First, because they approached us actively, second, because we are impressed by WFO's network with the European Union (EU) and the European Commission. It is undeniable that a lot of countries, especially developing countries, have trouble with waste disposal. Unfortunately this typically includes plastic waste. In the worst case, the materials even end up in the food chain. Plastics are valuable materials, but they should be used wisely. The problem are those who let plastic end up in the sea.

It is our goal to contribute to environmental protection as a company. That is why we are, for example in the field of plastics, accredited according to ISO 14001. However, this should not be just words on paper, but part of our culture. We therefore support the EU and WFO in paying fishermen for bringing plastic waste along with their catch ashore. That does not only help the environment, but also small fishing companies, who sometimes face an existential struggle and whose catches are polluted with plas-

tic litter. Furthermore, the collection is the indispensable basis to reprocess the sea from plastic.

### *Can you imagine industrially recycling or reprocessing plastics collected from the sea?*

Yes. With Akro-Plastic GmbH and PolyComp GmbH, we have compounding plants that can discover ways of returning these products to the value chain – whether proportionally in compounds or else completely.

### *Why has this not been done already? Because of the complicated value chain or because the initial quality is likely to be very heterogeneous?*

The quality is still a sticking point at present. We work with customers in the high-quality segment of technical polymers for the automotive, aero and electrical/electronic industries. Constant material quality is very important here. Such products are rather to be used in the packaging or textile industries. However, we currently don't operate in these sectors.

### *How do your customers respond to your commitment to WFO?*

We approach the issue proactively and have received positive feedback. There are frequently debates and TV reports about marine litter. We want to sensitize people to the fact that not the material but rather its incorrect handling is the problem. We value our products accordingly. This includes to handle plastics sustainably, to recycle them or, for example, to opt for the production of bio-compounds. We hope that the entire plastics industry will become committed to closed loop systems in future. This also means to develop fewer but high quality plastic products, which are actually designed to be recycled. Latter is nowadays still limited.

*Interviewer: Franziska Gründel, editor*