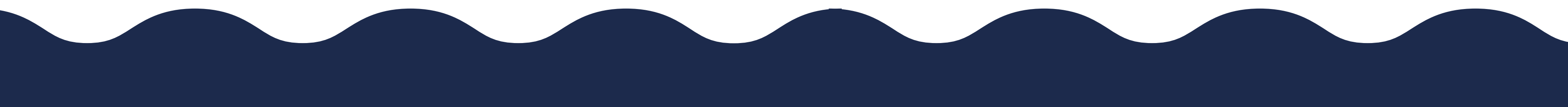




Cruise Ships Against Plastic Pollution
in the Mediterranean

A Good Practice Guide

ISOTECH Ltd Environmental Research and Consultancy



This Guide was produced with the financial assistance of Beyond Plastic Med (www.beyondplasticmed.org).

The contents of this Guide are the sole responsibility of ISOTECH Ltd Environmental Research and Consultancy.

ABOUT THE PROJECT AND THIS GUIDE



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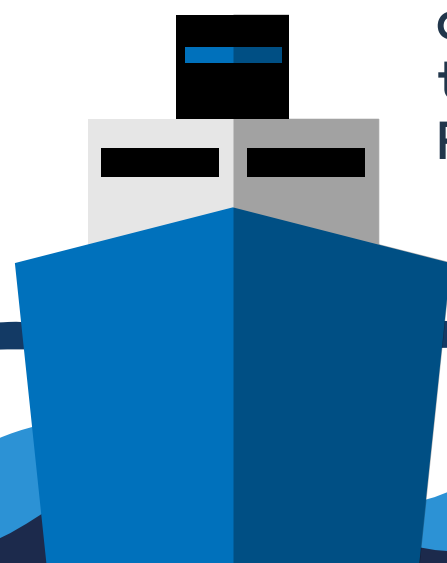


This Guide has been developed within the framework of the project “Cruise Ships Against Plastic Pollution in the Mediterranean” which is supported and endorsed by the Cypriot Deputy Ministry of Shipping, and funded by Beyond Plastic Med.

The overall objective of the project is to reduce plastic waste and specifically single-use plastics generated on cruise ships operating in the Mediterranean and promote effective waste management practices on cruise ships and at port reception facilities.

This will be achieved by encouraging and supporting key actors within the shipping industry to adopt practices that can be applied on ships to minimize their consumption of single-use plastics, reduce the amount of litter that they produce, and thus contribute to the overall reduction of marine pollution.

This Guide is a key tool to help meet the project’s goals as it includes effective and easily applicable practices that can be implemented both by ship management companies and seafarers to ensure that waste on board is minimised. The practices included within the Guide take into consideration the most recent policy developments at the European level, including the European Green Deal, the promotion of the Circular Economy and the Single-Use Plastics Directive, which will come into force in the summer of 2021.





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Marine litter is recognised as one of the most significant environmental threats to our planet. While a huge variety of materials and items is found in the marine environment, plastic has been recognized as the most abundant and persistent form of marine litter globally, with a recent study suggesting that over 5 trillion plastic pieces are currently floating around the world's oceans. In its larger forms, such as for example plastic bags, plastic can cause the entanglement and suffocation of marine wildlife. However, in the marine environment, plastic does not biodegrade but rather breaks down into continuously smaller pieces, until it forms microplastics (fragments smaller than 5mm), which can be ingested by marine wildlife. These microplastics can severely incapacitate marine wildlife since animals that ingest them feel satiated while they are in fact starving to death. Perhaps more worrying is the fact that microplastics also transfer organic pollutants to marine animals and consequently to our food chain, as ingested microplastics have been identified in marine organisms destined for human consumption. The effect that this can have on human health is still uncertain!



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Marine litter is an economic problem as well. For most countries in the Mediterranean, tourism is a key economic activity, largely dependent on the sunshine and their pristine coasts and beaches. However, tourists are unlikely to return to an area that is polluted with marine litter, therefore the elimination of litter and the preservation of the Mediterranean beauty should be priorities, not just for civil society and public authorities, but for coastal and marine tourism stakeholders as well. This of course includes the cruise ship industry, which is a major player in the Mediterranean.

The total number of cruise passenger visits at Mediterranean ports in 2019 reached 31.2 million, showing a significant increase compared to 2018, when the number of passenger visits was 27.9 million. As the influx of passengers grows, cruise ship generated waste also grows. Unsurprisingly, the most common type of waste collected on an annual basis from ships is plastics. While detailed data are not available, due to the nature of the operation of cruise ships it is probable that single-use plastics make up a significant proportion of the plastic waste produced on board.



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Single-use plastics constitute over 70% of all marine litter items, posing a serious threat to marine ecosystems and to human health, and causing serious economic damage to the tourism and shipping industry. This is why the European Commission adopted the Single-Use Plastics Directive, which will come into force in July 2021 in all Member States. The Directive will ban or restrict the use of the most common types of single-use plastics that end up in the marine environment (see Table 1). Therefore, citizens and industry alike will have to prepare for this Directive and adapt their purchasing practices and supply chains accordingly.

This Guide seeks to support the cruise industry in its preparation for meeting the requirements of the Single-Use Plastics Directive by bridging potential information and awareness gaps and by engaging key stakeholder groups and encouraging them to make a difference by incorporating more sustainable practices in their cruise ships and thus contributing to the fight against plastic marine pollution!

Table 1: Measures for Single-Use Plastics included in the EU Directive










































ITEM	Ban	Reduce use	Awareness raising	Extended Producer Responsibility	Marking Requirements
 Balloon sticks					
 Cutlery, stirrers, straws and plates					
 Cotton swab sticks					
 Expanded polystyrene products					
 Oxodegradable plastic products					
 Drink Bottles (up to 3L - allowed only if caps remain attached)					
 Drink cups					

Table 1: Measures for Single-Use Plastics included in the EU Directive

ITEM	Ban	Reduce use	Awareness raising	Extended Producer Responsibility	Marking Requirements
 Food Containers					
 Fishing Equipment					
 Wet wipes for personal hygiene and household use					
 Thin plastic bags					
 Balloons					
 Snack bags & wrappers					
 Cigarette butts					
 Sanitary pads, tampons and tampon applicators					

Source: DIRECTIVE (EU) 2019/904 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

GREEN DEAL and CIRCULAR ECONOMY on cruise ships

In December 2019, the European Commission presented the European Green Deal. It is a new development strategy aimed at transforming the European Union into a just and prosperous society with a modern, competitive and resource-efficient economy, in which, by 2050 net greenhouse gas emissions will be zero and economic growth will be decoupled from resource use. It also aims to protect, preserve and strengthen the EU's natural capital, as well as to protect the health and wellbeing of its citizens from risks and effects related to the environment.

One of the main parts of the European Green Deal is the Action Plan to enhance the efficient use of resources by moving to a Circular Economy. The Circular Economy refers to economic development that moves away from the linear model of build-use-discard, towards a model where products are designed for reuse and waste is viewed as a resource. Therefore, the Circular Economy Action Plan announces initiatives throughout the life cycle of products, aiming at their design, the promotion of circular economy processes, the promotion of sustainable consumption, with the aim of ensuring that the resources used will be maintained in the economy for as long as possible.

The European Green Deal, the Circular Economy Action Plan and the Single-Use Plastics Directive cannot bring the desired results, if we do not act at the individual and corporate level.

GREEN DEAL and CIRCULAR ECONOMY on cruise ships



Graph 1: Circular Economy – Six process step cycle

Source: Business Europe

The best practices and tips included within this Guide, have been designed with individual and corporate responsibility at their core, and take a circular approach to the issue of plastics and plastic waste management!



COVID-19 and new sustainable regularity

“The crisis brought by the global pandemic has shaken the shipping sector, and especially the cruise ship sector, causing incalculable damage. This may be the right time to reflect, the opportunity to see the world from a new perspective. Nothing is as vital and important as the health and well-being of our planet. Let's not go back to our old ways. The new normal can be cleaner, greener and more sustainable for the cruise ship industry. This is an opportunity not to be missed and a future worth investing in!”



GOOD PRACTICES

TO REDUCE PLASTIC WASTE



GOOD PRACTICES...

GREEN PURCHASING
AND AGREEMENTS

1

REFUSING & REDUCING

2

RECYCLING

3

INCREASING
PUBLIC AWARENESS

4

STAFF
TRAINING

5

ADDITIONAL ACTIONS

6

***...TO SAVE THE
OCEAN
FROM PLASTIC
POLLUTION!***



It all starts with what you bring on board. Buy environmentally friendly products and services and include environmental parameters in your purchasing terms and conditions, thus achieving reuse and reduction of plastic products!



Configure contracts with catering and product provision companies to make the ship's supplies 'greener'.



Co-operate with catering companies that can supply locally sourced, seasonal and fairly traded or organic products.



Apply sustainability criteria when evaluating suppliers.



Redefine your purchasing policy to buy more items in bulk, minimizing packaging waste.



It all starts with what you bring on board. Buy environmentally friendly products and services and include environmental parameters in your purchasing terms and conditions, thus achieving reuse and reduction of plastic products!



Avoid small plastic disposable containers of personal care products such as shampoo, conditioner, body wash, lotion, soaps in cabins. Instead, purchase these products in bulk and provide them in refillable dispensers.



Replace disposable plastic bags with reusable bags for on-board shopping. Offer passengers the option to purchase reusable bags at a nominal price or even include a branded reusable bag as a gift in each cabin.



Avoid single-use condiment packets, single-use butter, jam, honey packets, sauces, dressings, sugar, salt/pepper etc. in cruise ship kitchens and service areas.



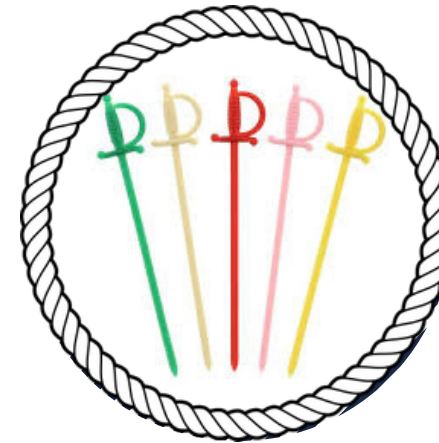
Avoid trash can liners. If you must use trash can liners, then choose biodegradable ones.



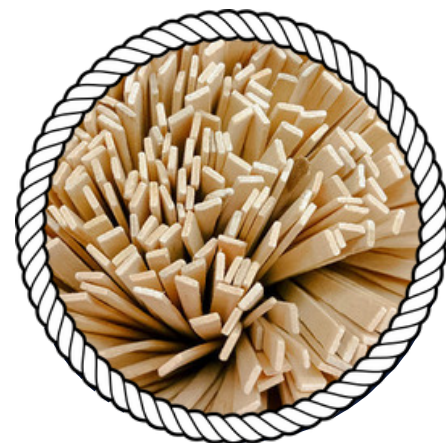
It all starts with what you bring on board. Buy environmentally friendly products and services and include environmental parameters in your purchasing terms and conditions, thus achieving reuse and reduction of plastic products!



Avoid single-use cutlery. If you must use them, purchase edible cutlery made of millet, rice and wheat - Eat with it and then Eat it!



Avoid using cocktail garnish picks.



Avoid using stir sticks. If stir sticks are necessary, use those made of wood or biodegradable materials.



Use take-away cups made of biodegradable materials (e.g. bamboo or corn).



It all starts with what you bring on board. Buy environmentally friendly products and services and include environmental parameters in your purchasing terms and conditions, thus achieving reuse and reduction of plastic products!



Source eco-friendly water bottles for passengers to utilize during their stay instead of using plastic cups or single-use plastic bottles.



Reduce the use of plastic aprons used by staff, or use fabric ones instead.



Reduce the quantity of plastic by choosing alternatives made of reusable or more environmentally friendly materials!



Use straws only if necessary and avoid including them in drinks unless the passengers ask for them. Replace disposable plastic straws with straws made of paper, stainless steel, bamboo, or even baked macaroni.



Offer your passengers filtered tap water rather than water in plastic bottles (ex. water fountain with UV filters).



Use take-away plastic cup lids only if necessary, or if your passengers ask for them.



Use refillable water bottles for lunch and dinner and in cabins.



Separate your waste and recycle!



Place small recycling bins in corridors outside cruise ship cabins, accompanied by a waste management information card. Thus, passengers will become more aware of your sustainability efforts and will be encouraged to participate in the cruise ship waste recycling and management programs.



Separately collect food waste to be sent for composting.



Install recycling bins for staff and cruise ship activities, located in steward stations, galley and crew areas, room service pantries and bar pantries.



Install recycling bins with clear labels (PMD, paper, glass, organic, batteries, electric & electrical equipment) in areas accessible to passengers.



Separate your waste and recycle!



Recycle used cooking oil on board, i.e. convert it into biodiesel to power cruise ship machinery, or separately collect it and send it for recycling via port reception facilities.



Dispose of your separately collected recyclable waste at ports with appropriate port reception facilities.





Become an information and awareness-raising point for your passengers!



Encourage passengers to join your efforts: Charge a small deposit for plastic cups and return when customers bring back their empty cup. Offer beverages at reduced price if passengers bring their own mug or flask.



Inform customers about the coastal ecosystem and the effect of marine litter on it by posting relevant information on a table, a TV screen on your website or on social media.



Share your cruise ship practices to reduce marine litter through your website and social media or at an info kiosk in the lobby area.



Post the Environmental Policy you apply in the departments and in the cabins of the cruise ship.



Become an information and awareness-raising point for your passengers!



Encourage staff and passengers to participate in environmentally-oriented, 'green' activities at the ports of call at no additional cost to passengers. (e.g. work with organizations to rescue animals, restore a garden damaged by a hurricane, clean parks, clean beaches / seabed, etc.).



Collect various reusable materials, which can be used in the cruise ship playground as an educational game, where children can make various decorative handmade creations (creating plant pots from reusable plastic bottles).

Train crew members on sustainability issues and plastic waste reduction!

Provide information to crew members on the need to reduce waste in the business environment and the effects plastic has on the marine environment.

Require cruise line employees to attend a training course on shipboard waste management and recycling practices (what is recycled, which bin, etc.).

Encourage crew members to implement more environmentally friendly practices. For example, recognise an employee of the month or offer a cash bonus to those employees that become champions of your efforts.





Place a library in the lobby area where used books will be left and borrowed by passengers.



Donate reusable materials to at-need communities at ports of call.



Donate furniture, linens, small appliances, kitchenware, clothes etc. to charities, instead of sending them to landfill.



Collaborate with non-governmental organizations and support their actions e.g. collaborate with AKTI to recycle used cooking oil (Tiganokinisi) etc. supporting the circular economy. In the cruise industry, the circular economy aims to increase resource productivity and minimize waste generation, pollution and carbon emissions.





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Looking for more ideas on how to become a more Environmentally Responsible Cruise Ship?

Contact Us:

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*The Initiative benefits from the support of
Beyond Plastic Med (www.beyondplasticmed.org)*

The only way to reduce plastic waste and specifically single-use plastics generated on cruise ships is to change the corporate culture from the top!

