





This Manual was compiled in the project SUSTOUR - Promoting sustainability among the European tour operator sector, co-funded by the COSME programme of the European Union.



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Futouris e.V.

www.futouris.org

Preserving the heritage of holiday destinations and developing a sustainable future for the travel industry - that is what Futouris stands for! Our members are committed to the improvement of living conditions, the conservation of biological diversity and environment and to climate protection. Our aim is to help - in the long term, comprehensively and sustainably. All measures are planned and implemented in close collaboration with the local people.



Travel Without Plastic

www.travelwithoutplastic.com

Travel Without Plastic is an organisation established by tourism and sustainability professionals to provide practical advice and implement strategies to reduce unnecessary single-use plastic consumption, creating environmental benefits, reducing costs and engaging staff and customers from across the tourism sector. Travel Without Plastic created a range of online tools including the Let's Reduce Single-Use Toolkit which is available on their website.



Save The Med

www.savethemed.org/en

The organisation Save The Med, based on Mallorca, aims to reduce the amount of single-use plastic products used in the Balearic Islands. They launched their "Plastic Free Balearics" Programme in 2018 with the objective of tackling plastic pollution in the islands by working together with businesses, organisations, communities, schools, local authorities and individuals towards a 100% single-use plastic free Balearic Islands.

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Did you know that...?

...8 million tons of plastic waste enters the oceans each year¹

... it takes up to 450_{years} for a bottle to decompose²

... our oceans could contain more plastic than fish by 2050³

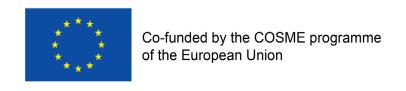
... tourism increases the waste in the Mediterranean Sea by 33% during summer⁴

... single-use plastic items such as

straws and bottles

are amongst the most common litter items found on beaches⁵

... the financial impact on Mediterranean tourism industry due to plastic pollution is approx. 268 million € each year⁶





Why plastic waste is a problem

Up to 8 million tons of plastic waste enter the world's oceans each year. According to estimates, about 80% of the garbage found in the sea is plastic waste. These plastics do not decompose in the same way as organic material or paper. The decomposition takes much longer and even then, they simply degrade into much smaller particles known as microplastics, which contain toxins. These are eaten by plankton and fish and ultimately end up in our food chain.

Plastic pollution can cause great harm to the marine environment and wildlife and it also causes economic risks, e.g., for tourism in coastal regions suffering from polluted beaches.

The role of plastic waste in tourism

The tourism and hospitality sector is equally a contributor to and victim of the problem of plastic waste. In their holiday hotels, guests are offered single-use plastic items such as drinking cups or straws, plastic bottles or bags. A study by the environmental organization WWF shows that due to tourists, marine litter increases by up to 33% on Mediterranean coasts during the summer.

As tourism depends on intact nature and beautiful, clean beaches, plastic waste causes a huge economic risk to its longer term viability, e.g., when tourist arrivals are declining due to polluted beaches.

Joint efforts to prevent plastic pollution

In response to the problems caused by plastic pollution, the European Commission defined a European strategy for the future use of plastics in January 2018. The plans are to reduce the consumption of single-use plastic products as well as the use of microbeads. A directive with corresponding provisions applicable throughout the EU entered into force in early summer 2019 and is currently being implemented in the member states.

The members of the sustainability initiative Futouris e.V. fully support this approach. In their joint project "Plastic-free Holidays" they are working with hotels to reduce the amount of unnecessary tourism-related single-use plastic waste.

Moreover, Futouris is participating in the project "SUSTOUR - Promoting sustainability among the European tour operator sector" (co-funded by the COSME programme of the European Union), working together with travel industry partners from various EU countries to foster the capacity and skills of tourism businesses in the field of sustainability; one focus topic being plastic waste reduction.

In order to support hotels in reducing single-use plastic waste and to implement sustainable alternatives, this hotel plastic reduction manual was developed. It provides practical advice, focusing on how to purchase and implement more sustainable alternatives to the TOP 5 unnecessary single-use plastic products that are commonly found in hotels.

Sustainability Ratings Charts

On the following pages you will find Sustainability Ratings Charts for alternatives to replace the TOP 5 unnecessary single-use plastic items most used in hotels.

The Sustainability Ratings Charts provide immediate information about the impacts of more sustainable alternatives for the most commonly occurring single-use plastic items in hotels. They show the sustainability scoring of each alternative using a traffic light system to make this easily usable. The objective of the ratings charts is to help hotels make more informed purchasing decisions when it comes to sourcing alternative products.

The applicabe unnecessary single-use plastic item is positioned above each chart with its sustainability rating clearly displayed. The potential alternatives that can be used to replace the single-use plastic product are then listed on a scale of 1–10. A solution rated 0 has the least negative impact, a solution rated 10 has a high negative impact and corresponding traffic light colours provide a more visual demonstration. In general, reusable solutions are preferred to just replacing single-use plastic with a different disposable material. All suggested alternatives are compliant with the EU Plastics Directive.

The ratings charts also include "responsible disposal" instructions for the alternatives that are listed. Ideally, when products cannot be avoided, the alternatives would be chosen in accordance with what material is most compatible with the local waste infrastructure. Disposal methods for "reusable" products are relevant when the product is no longer fit for purpose.

From page 32 onwards you will find further information on correct recycling and disposal.

Single-use plastic water bottles | Impact 7,05

Potential Alternative	Impact Rating	Disposal Method (see disposal tables for further information)
Tap water	0	NO WASTE
Dispenser with returnable big size water container (guests to refill their bottle)	2,14	RETURN TO SUPPLIER
Reusable bottle (carafes) with filtered water on site	2,20	PACKAGING WASTE
Medium glass bottle (local & returnable to supplier)	2,20	RETURN TO SUPPLIER
Medium plastic bottle (local & returnable to supplier)	2,64	RETURN TO SUPPLIER
Medium glass bottle (local & disposable)	4,40	GLASS RECYCLING
Single-use medium size bottle made from recycled plastic	4,86	PACKAGING WASTE
Carton box of water	7,38	PACKAGING WASTE

Examples



Refillable glass bottle



Water dispenser



Refillable stainless steel bottles



Potential Alternative	Impact Rating	Disposal Method (see disposal tables for further information)
Reusable cups made from glass	2,93	GLASS RECYCLING
Reusable cups made from stainless steel	3,01	RECYCLING POINT
Reusable cups made from hard plastic	4,27	PACKAGING WASTE
Single-use cups made from 100% home compostable material (e.g. bagasse)	5,67	ORGANIC COMPOST COLLECTION or GENERAL WASTE
Single-use paper cups lined with aqueous plastic	5,85	ORGANIC COMPOST COLLECTION, PAPER WASTE
Single-use paper cups lined with home compostable plastic	6,49	ORGANIC COMPOST COLLECTION or GENERAL WASTE
Single-use paper cups lined with traditional plastic	6,79	GENERAL WASTE
Single-use cups made from industrially compostable plastic	7,01	INDUSTRIAL COMPOST COLLECTION or GENERAL WASTE

Examples



Reusable hard plastic cup



Reusable stainless steel cup

Single-use plastic/aluminium coffee capsules

Impact 10



Potential Alternative	Impact Rating	Disposal Method (see disposal tables for further information)
LARGE (bulk buy size) bag of ground coffee made from paper/aluminium composite (used to serve coffee in cafetieres, filter coffee pots or barista style coffee machines etc.)	2,7	PACKAGING WASTE
Reusable stainless-steel capsule	3,01	SEPARATE FOR RECYCLING
MEDIUM (domestic size) bag of ground made from paper/aluminium composite (used to serve coffee in cafetieres, filter coffee pots or barista style coffee machines etc.)	4,04	PACKAGING WASTE
LARGE bag of ground coffee made from multi-layer plastic (used to serve coffee in cafetieres, filter coffee pots or barista style coffee machines etc.)	4,06	Coffee bag = PACKAGING WASTE
Reusable silicone capsule	4,27	GENERAL WASTE
Individual coffee bags wrapped in paper	4,38	GENERAL WASTE
Coffee granules in an individual serving size paper sachet	5,85	PAPER WASTE
Coffee bags (like tea bags) wrapped in paper/aluminium composite sachet	6,08	GENERAL WASTE
Single-use capsules made with recycled plastic	6,48	PACKAGING WASTE
Single-use capsules that are certified as industrially compostable	6,72	INDUSTRIAL COMPOST COLLECTION or GENERAL WASTE
Single-use capsules that are certified as home compostable	6,72	ORGANIC COMPOST COLLECTION or GENERAL WASTE

Example

Compostable coffee capsules



Single-use plastic amenities | Impact 8,54

Plastic wrapping | Impact 7,05



Potential Alternative	Impact Rating	Disposal Method (see disposal tables for further information)
No amenities at all/amenities as part of service	0	NO WASTE
Replace amenities with services (e.g. sewing repair, shoe-shining on request)	0	NO WASTE
Amenities made from mixed plastics and wrapped in paper	Amenity 8,54 Paper 5,83	PACKAGING WASTE and PAPER WASTE
Amenities made from and wrapped in recycled plastic	6,48	PACKAGING WASTE
Amenities made from and wrapped in home compostable plastic	7,02	ORGANIC HOME COMPOST or GENERAL WASTE
Amenities made from and wrapped in industrially compostable plastic	7,02	INDUSTRIAL COMPOST or GENERAL WASTE

Mini toiletries Impact 8,54



Potential Alternative	Impact Rating	Disposal Method (see disposal tables for further information)
Unwrapped soap bar	0	NO WASTE
Refillable dispenser that use large format returnable plastic bottles	1,76	RETURN TO SUPPLIER
Refillable dispenser that use large format non-returnable plastic bottles that are recycled	3,53	PACKAGING WASTE
Refillable dispenser that use non-returnable HDPE bag refills that are recycled	5,26	PACKAGING WASTE
Solid shampoo, conditioner or body lotion wash in cardboard packaging	5,28	PAPER WASTE
Miniature bottles made from stainless steel	6,03	RECYCLING POINT
Powder shampoo in industrially compostable tabs	6,21	INDUSTRIAL COMPOST COLLECTION or GENERAL WASTE
Miniature sachets made from recycled plastic	6,48	PACKAGING WASTE
Miniature sachets made from bio-based materials	7,02	INDUSTRIAL COMPOST COLLECTION, HOME COMPOST COLLECTION or GENERAL WASTE
Domestic size bottles (250-300 ml) that are recycled	7,05	PACKAGING WASTE

Examples



Refillable hand soap dispenser



Refillable shower gel dispenser

Impact 5,06



Single-use plastic bin liners

Potential Alternative	Impact Rating	Disposal Method (see disposal tables for further information)
No bin bags at all	0	Dispose of waste inside the waste bin accordingly.
Reusable, washable bin liners	2,53	PACKAGING WASTE
Single-use bin liner made from recycled plastic	4,86	GENERAL WASTE
Single-use bin liner made from bio-based material (e.g. corn/potato starch)	5,26	ORGANIC COMPOST COLLECTION
Single-use bin liner made from paper	5,85	PAPER WASTE

Example





Decision Trees

How to choose the best alternative for single-use plastic items

The decision tree instrument was developed to provide additional guidance for hotels to choose the best and most sustainable alternative for single-use plastic items in their specific context.

The decision trees follow the waste reduction hierarchy and demonstrate a simple but effective step by step process that businesses can use to replace single-use plastic products with more sustainable alternatives. The steps that are presented first are those that can maximise a reduction in waste.

It is important to avoid the habit of replacing single-use plastic products with other single-use alternatives. While doing so may reduce plastic consumption, it simply shifts the burden of waste generation from one material to another. It is important that any plastic reduction activities are part of a wider waste reduction strategy that encourages a reduction in waste generation overall.

At the same time, the decision trees are realistic, not all businesses can reduce or eliminate single-use items and not all businesses can implement reusable or refillable alternatives at this time, hence the importance of the hierarchy.

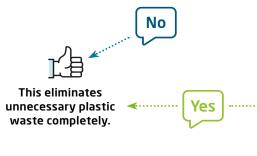




Decision tree for plastic water bottles

Single-use plastic water bottles are provided for guests.

See our
Sustainability
Ratings Chart and
Standard Operating
Procedure Booklet to
make a more
informed
decision.



Could single-use plastic bottles be remove completely by offering water to guests, as tap water or via water refill stations to avoid single use waste?



Replace single-use plastic water bottles with better rated alternative.*

Create procedures to ensure proper disposal of alternative packaging.

Yes

Could the water be provided in other packaging formats such as larger volume bottles, recycled plastic bottles in large volume sizes or in glass bottles?



Create procedures to ensure empty recyclable products and packaging are separated for recycling.

It is important
to remember that not
all materials are
recyclable and you
should check with
your local waste
facility.

Do facilities exist to recycle bottles in your destination?



Continue to minimize waste by only providing single-use water bottles when necessary.

WASTE

HOW TO DISPOSE OF

Disposable glass bottle	→	Separate for glass recycling.
Disposable plastic bottle	→	Separate for plastic recycling.
Bottle made of recycled plastic	→	Separate for plastic recycling.
Tetrapak box of water	→	Separate for recycling with plastic or check with your local waste facility.

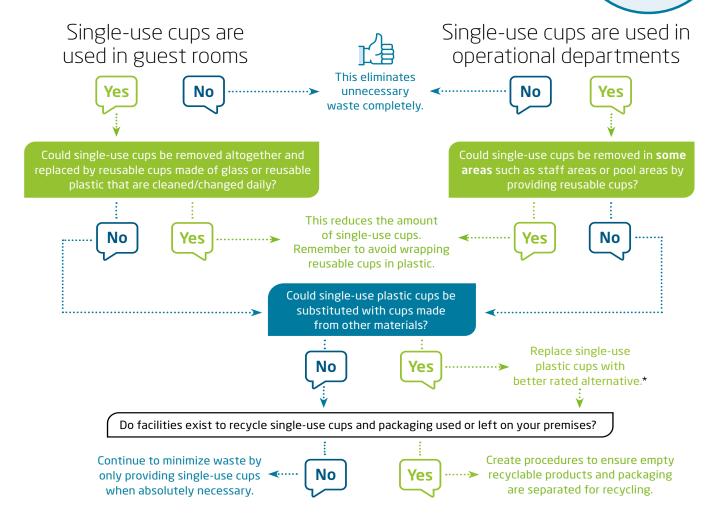
- When thinking about the installation of on site filtration, remember that osmosis systems do create waste water and work with technical services teams to ensure that this water is captured for use in irrigation systems or swimming pools rather than it going to waste.
- If you do switch from bottled water to implementing your own filters or to
 providing tap water, it is a good idea to prepare some customer communications that give people confidence that the water is safe to drink, tastes great,
 reduces plastic consumption etc.







See our
Sustainability
Ratings Chart and
Standard Operating
Procedure Booklet to
make a more
informed
decision.



WASTE HOW TO DISPOSE OF

Paper cups with bio-based plastic lining

→ Separate for specialist collection at an industrial facility if facilities exist.

If facilities do not exist, avoid these materials. If you must use them, dispose of with general waste. **Do NOT dispose of with paper or plastic recycling.**

Paper cups with traditional plastic lining

→ Dispose of with general waste.

Paper cups with aqueous lining

→ Preferably compost on site. Separate for composting collection. Dispose of with paper recycling.

Single use cups made from bio-based plastic

→ Separate for specialist collection at an industrial facility if facility exists. If facilities do not exist, avoid these materials. If you must use them, dispose of with general waste. **Do NOT home compost!**

- Paper cups lined with plastic as they are not recyclable as the two materials are so tightly bound together that machinery at recycling facilities cannot separate them.
- Cups that are made from or lined with bio-based plastic need to be separated and collected to go to a special industrial composting facility. If these facilities are not available to you it is best to avoid these products.
- If traditional plastic cups are not disposed of properly, they can become pollution and break down into dangerous micro-plastic pieces.







Decision treefor coffee capsules

Single-use plastic/ aluminium coffee capsules are provided on site. See our
Sustainability
Ratings Chart and
Standard Operating
Procedure Booklet to
make a more
informed
decision.







No



Could single-use capsules be replaced with a differen style of service e.g. a cafetiere (guest rooms), coffee menu served to order (F&B outlets) if the coffee met quality standards?

Could single-use plastic/aluminium capsules be replaced with coffee provided in alternative single-use packaging?

Yes





Replace single-use capsule with better rated alternative.*

That significantly reduces unnecessary plastic/aluminium waste.

Do public or private facilities exist to collect single use plastic/aluminium coffee capsules for recycling?

No

Replace single-use plastic/ aluminium capsules with better rated alternative.* Remember, don't throw coffee grounds away, they are excellent for composting. Ensure any other coffee packaging is separated and responsibly disposed of.



Continue to minimize waste by only providing single-use plastic/aluminium coffee capsules when absolutely necessary.

Create procedures to ensure that single-use plastic/aluminium coffee capsules are separated for recycling. Check with your waste disposal contractor to make sure that recycling actually takes place.

WASTE

HOW TO DISPOSE OF

Plastic capsules with recycled content	→	Remove coffee grounds and separate for collection with plastic recycling.
Capsules made of bio-based materials	→	Separate for specialist collection at an industrial facility if facility exists. If facilities do not exist, avoid these materials. If you must use them, dispose of with general waste. Do NOT home compost!
Coffee bags composed of paper with aluminium foil	→	Separate for collection with plastic (aluminium) and paper recycling.
Paper sachets	\rightarrow	Separate for collection with paper recycling.

- Many capsules are made from aluminium which is extremely resource intensive to extract.
- Even if capsules are disposed of with aluminium recycling, they are so small, they often fall through the cracks in recycling facilities and end up in landfill or being incinerated.
- If capsules were captured at recycling plants, they would need to be washed to remove coffee residue before they could be recycled.
- Coffee bags composed of multiple materials (e.g. paper with aluminium foil) makes the recovery process of these containers difficult.
- Paper sachets lined with foil are often used to package loose coffee or coffee bags (similar to a teabag) in order to keep the coffee fresh and maintain the flavour profile.
- Similar to the capsules, sachets are so small that even if they can be processed at
 waste management facilities they often fall through the cracks and also end up
 in landfill or being incinerated.

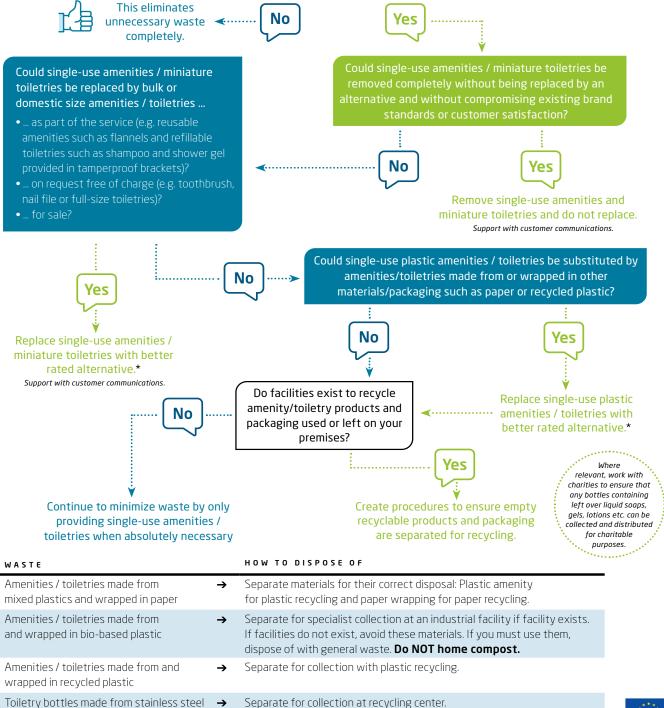






* See our
Sustainability
Ratings Chart and
Standard Operating
Procedure Booklet to
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informed
decision.

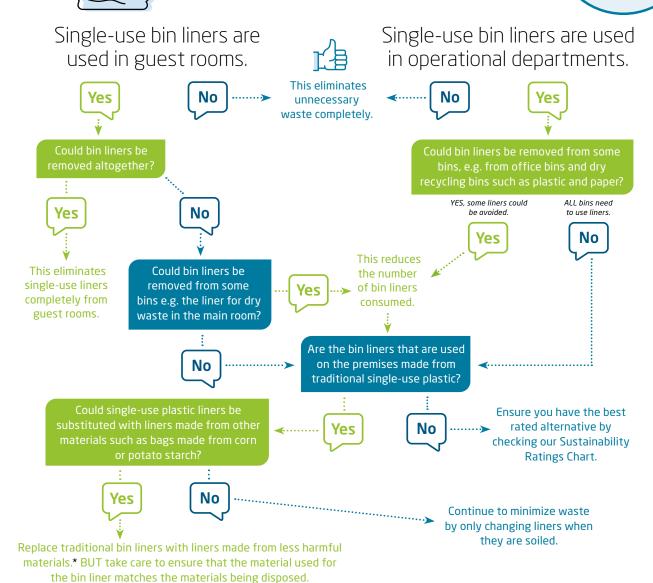
Single-use amenities or single-use miniature toiletries are provided for guests.







See our
Sustainability
Ratings Chart and
Standard Operating
Procedure Booklet to
make a more
informed
decision.



WASTE

HOW TO DISPOSE OF

Liners made from potato starches

→ Are seen as potentially biodegradable. Use to dispose of organic waste or general waste.
Do NOT use starch liners to dispose of plastic that is destined for recycling.

Liners made from recycled plastic •

→ Only use for waste that has no recycling value (e.g. general waste) and dispose of in general waste. Do NOT use liners to dispose of used plastic products that are destined for recycling.

Liners made from paper

→ Use for paper waste. Separate for collection with paper recycling.

- Avoid using bin liners for dry waste or to dispose of recycable waste. Whilst
 the products inside the liner may be recyclable, the liner itself is usually not.
- If organic waste is destined for home or industrial composting, use paper or bags made from corn or potato starch.
- Traditional plastic bags and bags made from recycled plastic that are disposed of in landfill can break down into microplastics that last for centuries.
- Bio-based bags that are used to dispose of general waste that are destined for landfill will break down creating methane which is 20 times worse than CO₂.



Switching from disposable to reusable products, or implementing a new process that enables a hotel to eliminate a single-use product can come with a lot of uncertainties for business operations and customer satisfaction. Therefore, we have developed Standard Operating Procedures which show step by step instructions to follow so that reusable alternatives can be implemented safely and effectively.

The following Standard Operating Procedures have incorporated the technical insight of health and safety experts at Intertek Cristal, and are intended to help businesses minimize unnecessary waste without compromising the guest experience, or health and safety expectations..

It is recommended that any changes be supported with positive customer communications, and that any customer-facing staff are trained so that they are able to respond to guest comments or concerns positively and professionally.

for reusable water bottles



Background



Bottled water is convenient, travellers can easily carry it with them when moving around in their holiday destinstion, and bottles can easily be disposed of when empty. Bottled water is often also perceived as more hygienic than refillable water bottles or water dispensers which is not necessarily true if basic hygiene standards are followed.

Hotels can be part of the solution by providing reusable bottles and refill possibilities throughout the hotel.

Steps to consider when using reusable bottles

- Ensure that **guests can refill their bottles during their stay.** It is recommended to provide refillable options free of charge. There are many ways to do this:
 - **a.** Tap water: If the tap water is safe to drink in your region and has been tested and declared safe in your hotel, you can inform your guests about this, so that they can refill their bottles with tap water.
 - **b.** Water refill stations: Set up water refill stations / water dispensers on every floor and throughout the hotel so that guests can refill their bottles easily.
- Decide whether you would like to give each guest a bottle for them to take home or whether the bottles or carafes will be part of the guest room facilities, cleaned and re-used for the next guests. Your decision might depend on existing facilities to clean the bottles hygienically, available storage space, customer perception (you can provide very positive communications that make it clear bottles are thoroughly cleaned) etc.
 - a. When providing bottles for guests to take home bear in mind to use a high-quality material and nice-looking design which will encourage guests to reuse the bottle many times.
 - **b.** When providing bottles during the holiday, **establish a procedure to ensure all bottles are** collected and cleaned properly before the next arrival.





- Calculate how many refillable bottles you will need without having a shortage and decide on an appropriate material. Glass bottles might look nice but are very heavy and may break more easily, whereas steel or aluminium bottles are lighter and very resistant. → See our Sustainable Ratings Charts to make a more informed decision.
- 4 Encourage your guests to bring their own reusable bottle by integrating a brief and positive communication in the booking confirmation.
- Involve and train your staff so that they support the plastic waste reduction measure(s) and know their responsibilities.
- Provide a refillable bottle for each guest in their rooms together with information on your hotels water refill system. Alternatively or in addition, a system can be set up at drink, food and beverage stations for reusable bottles to be requested/returned by guests.
- Inform your guests WHY you are providing reusable bottles and also explain the benefits. Assure your guests that the bottles are clean and the water is safe to drink (especially when offering tap water/water from fountains).
- Inform your guests about refill options in the destination (i.e. public water fountains or regional refill systems like www.cleanwave.org), to encourage your guests to also use the refillable bottle while they are exploring the destination.

for water provided to guests





for reusable cups and glasses



For further information please see our Sustainability Ratings Charts and Decision Tree for

Disposable cups are convenient, especially in tourism: Guests can get their drinks at the pool bar, or take them to the beach, they don't pose any safety hazards and no collecting or cleaning procedures are needed by the business as guests simply dispose of the cups after use.

Around 500 billion plastic cups are consumed globally every year and the sad truth is that the majority of them are not recycled. Instead, they often end up in nature and landfills, polluting environments and oceans and threatening wildlife. Plastic can take hundreds of years to break down, and in doing so they leave very small plastic pieces behind that have already been found in marine species that are consumed by humans.

Single-use plastic cups for beverages are among the top ten items found on European beaches.

This is one of the reasons why the European Union banned these (among other single-use plastic products) in 2021, aiming at preventing and reducing the impact of these on the environment (especially on the marine environment) and on human health.

> Tourism businesses can be part of the solution by switching to reusable cups and glasses.

Steps to consider when using reusable cups or glasses

- 1 Calculate how many reusable cups/glasses you will need in order to replace single-use glasses without having a shortage (bearing in mind some will be waiting to be washed, being washed or being dried, as well as being used).
- Choose **appropriate reusable material** → that can depend on the washing facilities and existing conditions in your business (e.g. glass should not be used around pools or on beaches for safety reasons). Glass and Tritan will usually wash well in dishwashers, polycarbonate glasses are much better quality now than previously, acrylic glasses may still scratch. → See our Sustainable Ratings Charts to make a more informed decision.
- Ensure that there are **suitable storage areas** for reusable cups and glasses, remember to consider how to avoid breakages and how to store hygienically.
- Establish a procedure to efficiently collect used glasses from public areas, this might include cups/glass collection points, or a regular patrol by staff to collect used cups/glasses. If collection points are used, make sure they are visible and easy to find, plentiful, regularly cleaned and sanitised throughout the day and regularly emptied.





5 Cleaning procedures:

Manual washing

Staff should wash their own hands first and then ensure that a suitable product is used to wash the cups/glasses.

The instructions for washing and drying should be followed.

Place cups facing upwards not downwards; cups facing downwards may pick up bacteria from the surfaces they are resting on.



Machine washing

Establish a procedure to collect used cups from guest rooms (this may require different equipment, or it may be easier to involve other staff (e.g. those who equip the mini bar) rather than leaving it as the responsibility of housekeeping).

Deposit cups/glasses in the correct dishwashing tray so that they can safely go through the dishwashing process.

Staff should wash their own hands first and then polish glasses with a clean cloth to remove watermarks.

Any glasses that have not been thoroughly cleaned by the dishwasher should be put back through to be washed again.

Allow cups/glasses to dry properly.

Store cups/glasses ready for use (remember to consider how to avoid breakages and how to store hygienically).

Ensure a supervisor or manager **regularly checks the cleanliness** of cups.



IMPORTANT: Ceramic cups and glasses are heavy, ensure that staff have been trained on appropriate lifting techniques if they are responsible for moving cups and glasses around the premises. Any breakages should be reported immediately. Cracked or chipped cups/glasses should be removed from service and ideally separated for recycling.

Standard Operating Procedures

for reusable cups and glasses





for coffee capsules



For further information please see our Sustainability Ratings Charts and Decision Tree for coffee capsules.

Around 56 billion coffee capsules are consumed globally every single year with **just 30% of these being captured for recycling** by the suppliers that make them. This has given rise to a number of companies that have created compatible pods made from home or industrially compostable alternatives.

Furthermore, there exist a wide range of solutions to provide coffee in a way that avoids single-serve **products** and reduces the negative impacts on the environment and climate, e.g. by offering a cafetiere with coffee grounds provided in sealable glass jars.

For two options we provide guidance what to consider from an operational point of view when providing coffee with a cafetiere or when providing single-use plastic/aluminium capsules.

Steps to consider when providing coffee with a cafetiere

A cafetiere does require some important changes to processes and procedures so that cafetieres and loose coffee are provided hygienically without impacting the guest experience.

Decide on **suitable size cafetiere** and glass jars for use in guest rooms.

Choose products that are **dishwasher safe**.

Check if new containers are required for items to go safely through dishwasher.

Ensure there is **enough storage space**.

Ensure used cafetieres in guest rooms are **replaced with clean ones daily**.

Assign **responsibility** for cafetiere collection (housekeeping or F&B).

Only refill coffee when necessary, on request or on changeover in order to avoid waste.

The coffee jars should be removed and cleaned properly for changeover.

Refill coffee jars in main kitchen or bar area and assign specific staff to the role.



Steps to consider when providing single-use plastic/aluminium capsules

If your business continues to use aluminium or plastic coffee pods, take steps to ensure that you work with a suitable waste collector who will take responsibility for ensuring they do not end up in landfill or incineration or with a supplier that will enable you to return used coffee pods to them.

Find a suitable **recycling partner** (waste collector, Nespresso Capsule Drop Off Point - Nespresso shops or a supermarket).

Check with recycling partner if coffee needs to be removed capsules before going to recycling. If so, **save coffee grounds** to use in gardens or donate to staff so as not to waste them.

Organise an area where capsules can be stored before being taken to or picked up for recycling.

Assign **responsibility** for ensuring capsules are collected or taken to a drop off point.

Ensure housekeeping teams are aware they need to retrieve used capsules from coffee machines.

Agree how capsules should be stored on housekeeping trolleys (avoid single-use plastic bags).

Agree guest communications.

e.g. Please leave used
e.g. Please leave used
capsules in coffee machine
capsules in coffee machine
container to be collected
container to be collec

Ensure guests have access to information (printed or QR code).

If capsules are collected by a waste disposal company, request receipts for reporting purposes that include weight of waste collected and confirmation of where capsules are taken.

Standard Operating Procedures

for coffee capsules





Standard Operating Procedures for amenities on request



Background

Single-use amenities and toiletries are an important part of the traditional hotel experience and thus have been very popular with guests. Some expect to have a comb, a sewing kit or cotton swabs in their rooms as part of the (luxury) service, for others they are convenient if they are traveling light or forgot their own products.

Sadly, the majority of these **single-use products** are made from plastic and **cause a lot of unnecessary plastic waste.** Therefore, hotels are under pressure to avoid them. The good news is that there are alternative procedures and products available to avoid unnecessary waste whilst still maintaining a high level of quality.

Providing amenities only on request is a great way to reduce unnecessary waste.

Steps to consider when providing amenities on request

- Create a suitable means of communication to inform guests which amenities are **available** and whether they are free of charge or at a cost (e.g. guest information sheet in rooms, information on TV channel, QR code in the bathroom etc.).
- Ensure that **amenities are accessible** by staff 24/7 e.g. have a stock at reception or ensure night staff have access to storage, particularly for guests who arrive after housekeeping teams have left for the day.
- Agree if guests need to come to reception or if amenities can be delivered to the room this may vary depending on the time of day and staff available.
- 4 Consider if requests for amenities can be **communicated via an app**, if so, ensure all relevant staff know how to respond quickly to the request.
- Make **larger**, **domestic size amenities available at a cost**, consider offering plastic free amenities for sale.



IMPORTANT: During periods of heightened infection, it is suggested that any amenities delivered to room are managed without staff contact (leaving outside room and notifying guest). Storage and handling of amenities should be considered as well.



Standard Operating Procedures for amenities on request





Standard Operating Procedures for hygienic refills of toiletries



Background

Shampoo and shower gel are often provided in miniature bottles in guest rooms as an extra service. With new guests arriving in the room, the used (mostly not empty) bottles are then removed and replaced with new ones, **leading to** the consumption of millions of small plastic bottles annually around the world.

Buying in bulk and using refillable dispensers is not only more cost-effective but also reduces the amount of plastic being consumed. Switching to bulk size bottles that can. be returned to the supplier to be refilled time and again can reduce the volume of plastic consumed by over 90%!*

Refill systems are increasingly popular as they greatly reduce the quantities of packaging and disposable material required to provide essentials for guests. Systems range in quality but there are some very stylish designs to suit all brands. To ensure that refillable toiletries are clean and hygienic, follow the steps outlined below.

Steps to consider when providing refills

including batch tracing, required for refills onsite and refills off site

- Where possible, choose **touch-free dispensers** for maximum hygiene.
- Ensure that dispensers are **tamperproof**.
- Choose bottles that enable housekeeping to easily see when a refill is required (e.g. a transparent line from top to bottom of the bottle).
- 4 Once empty, dispensers should be removed and completely cleaned prior to refill, including robust cleaning of the dispensing pump. Some dispensers and pumps are suitable for dishwashing (this may require having a second set of dispensers to ensure guest rooms are not left without amenities when dispensers need to be refilled).
- Refillable dispensers should be left to completely dry on the inside and outside, including the pump mechanism.
- Refill protocols should ensure that **strict procedures** are followed to **ensure traceability** and to prevent dispensers from being filled with the wrong product.

^{*} See the Futouris Plastic Guidance for tourism businesses for further information on the calculation.



- The surfaces of dispenser bottles and brackets should be **cleaned daily** as part of the housekeeping regime and sanitized on change over days.
- If ingredients are not clearly written on the bottle, they must be provided in some other format that is easily accessible to guests.



IMPORTANT: For traceability purposes, keep a log which enables you to trace batch numbers of refills. For

Standard Operating Procedures

for hygienic refills of toiletries





for reusable bin liners





Background

Every second around 160,000 plastic bags are used, many of which are single-use bin liners. Less than 1% of them are recycled, instead they often end up in nature and landfills where it takes hundreds of years for them to break down, and in doing so they leave very small plastic pieces behind that have already been found in marine species that are consumed by humans.

Bin liners are regularly identified as one of the most difficult plastic items to avoid by many businesses across a range of sectors. Some businesses wish to avoid bin liners altogether, to do so requires processes and procedures to ensure that bins are kept clean, and that housekeeping staff are able to operate safely. Firstly, you will need to decide if you will go liner free in all bins, other whether you will go liner free for dry, mixed recycling and have a liner for organic waste. This will very much depend on the type of business and the type of customer demographic.

We created two Standard Operating Procedures to support businesses in finding the most suitable option.

Steps to consider when removing single-use plastic liners

- Decide if the liner will be replaced with another item e.g. a newspaper or a large leaf that protects the base of the inner cylinder.
- Ensure that **suitable communications** are provided so that guests know how to dispose of waste, particularly if there is more than one bin in the guest room/bathroom.
- For liner free bins, housekeeping staff can **empty the contents directly into a large bag** (single-use or reusable).
- 4 If the **inner cylinder is not soiled**, use a cleaning/sanitising spray and **wipe thoroughly**.
- If the **inner cylinder is soiled**, remove the cylinder and **wash thoroughly** in the shower unit and allow to dry thoroughly (turning it upside down will help) before replacing it within the bin structure.



- Bins without liners should be **checked daily and emptied if necessary.** It is important to remember that a bin without liner may be contaminated even without being visibly soiled, so there should be a frequency of washing set regardless of the visible condition (this washing process should be designed to avoid overuse of toxic cleaning chemicals).
- For hotels operating minimal housekeeping services as a COVID measure, ensure customers are informed that they can request that their bins be emptied daily.

Steps to consider when using reusable bin liners

Reusable, washable bin liners are recently new to the market but increasing in popularity. Follow these steps to ensure that the waste is dealt with safely and hygienically by using reusable bin liners.

- 1 Insert reusable bin liner into a clean bin.
- Remove waste when necessary, ideally separating it for recycling where possible.

 Any dry recycling can be deposited into a larger bin attached to the house keeping trolley.

 Any organic waste can be deposited into a large waste liner (ideally made from potato starch) attached to the housekeeping trolley.
- If the **bin liner is not soiled, leave it in place** and use a cleaning/sanitising spray and **wipe thoroughly.**
- If the **bin liner is soiled, replace it with a clean one** and store the soiled one in a specific place on the housekeeping trolley where it cannot contaminate other products.
- Soiled reusable bin liners should be washed and dried according to the manufacturer's instructions. It is important to remember that a reusable liner may be contaminated even without being visibly soiled, so there should be a frequency of washing set regardless of the visible condition.
- Store dry bin liners ready for use.

Standard Operating Procedures

for reusable bin liners





Recycling & Disposal

Waste collection and disposal infrastructure in destinations varies greatly. Considering the available responsible disposal options, therefore, becomes an important factor when sourcing new products. Assuming that the business is doing everything it can to minimise waste at source, prioritising alternative products made from materials that are readily accepted by local waste management facilities can improve recycling and recovery rates. In turn, this can reduce the amount of waste going to landfill or incineration.

It is important to recognise that despite the information provided in the table below, smaller products (up to 6-8 cm) including sachets, bottle lids, straws, small ice-cream spoons, etc. are often filtered out during the first separation phase at waste processing plants. This is because processes are designed for maximum efficiency, meaning that even if these products were recyclable, they don't reach that stage in the process and will instead most likely be landfilled or incinerated.

Most common disposal methods and how likely it is that materials can be recovered and/or recycled.

Materials	Disposal Method	Considerations
Aluminium	PACKAGING WASTE	Aluminum is a material with a very high recoverability rate if the waste is correctly separated. Its recyclability rate is also high and both in Spain and in Europe there are many treatment plants for this waste. There is also a high demand for this material in the secondary market.
Ceramic	NON-RECYCLABLE	Ceramic is not recyclable, it is shredded and stored, in the smallest possible space, together with the rest of the non-recyclable waste, promoting its decomposition.
Corn starch/ Potato starch	HOME or INDUSTRIAL COMPOST COLLECTION	Bags made from potato starches are considered to be potentially biodegradable. However, bags made from these materials should only be used to dispose of ORGANIC waste or general waste. They should NOT be used to dispose of plastic that is destined for recycling.
Fabric	COLLECTION POINT or RECYCLING CENTRE	Fabrics need to be washed thoroughly before being disposed of in specific fabric collection containers. In Spain, 65% of the fabrics deposited in the fabric containers are destined for reuse (sold in second-hand stores and flea markets). 16% is recycled as stuffing for cushions, mattresses and other furniture. The remaining 20% is usually very deteriorated, which prevents it from being reused or recycled, so it is taken to waste treatment plants where it is likely to be landfilled or incinerated.
Glass bottles	GLASS WASTE	Glass is a material with a very high recoverability rate if the waste is correctly separated. Its recyclability rate is also high and both in Spain and in Europe there are many treatment plants for this waste. In addition, there is a high demand for this material in the secondary market.

Materials	Disposal Method	Considerations
Mixed materials	PACKAGING WASTE	For mixed material products like juice cartons and takeaway coffee cups it is extremely difficult to separate the layers of paper, plastic and aluminium, even with machinery. This difficulty can even prevent them from being recovered, which means that they have a very low recoverability rate and, consequently, a very low recyclability rate.
Paper coffee filters	GENERAL WASTE	Despite being made from paper, the fact that the paper will be wet from filtering the coffee means it cannot be recycled. Coffee grounds can be separated and used in soil. If using coffee filters, the impacts of the mixed material coffee bag should also be taken into consideration.
Paper (Greaseproof paper)	GENERAL WASTE	Greaseproof paper used for food is unlikely to be clean, therefore it is considered as a waste that cannot be recovered or recycled and it must be disposed of in the general waste container
Recyclable plastic	PACKAGING WASTE	PET plastic is one of the most recycled plastics in the world. Its recovery rate is medium (60%) and its recyclability is medium-high (80%), since there is a high demand in secondary markets. In order to be properly recycled, it must be cleaned, therefore there is an environmental impact due to the consumption of water and electricity required in the washing process.
Recycled plastic	PACKAGING WASTE	The recovery rate of recycled plastic from the management system is medium-low, as is its recyclability rate. In order to be properly recycled, it must be cleaned, therefore there is an environmental impact due to the consumption of water and electricity required in the washing process. Also, there is not much demand for this waste on the secondary market.
Reusable fabric (PPE)	SPECIALIST COLLECTION or GENERAL WASTE	In some destinations, private companies may offer the opportunity to collect PPE and process it into other products. There are some treatment plants that apply an autoclave sterilisation process to fabrics used for PPE so that they can be recycled, however, if these options are not available, many local regulations instruct that they should be disposed of with general waste to avoid possible contagions.
Reusable plastic (HDPE & PP)	PACKAGING WASTE	The recycling capacity of HDPE and PP in European countries has increased significantly in recent years, reaching rates of 30%. In order to be properly recycled, it must be cleaned, therefore there is an environmental impact due to the consumption of water and electricity required in the washing process. The demand for this material in secondary markets has grown strongly due to the pressure to reduce single-use plastics.
Silicone	GENERAL WASTE	Silicone is a material with a fairly low rate of recoverability and recyclability, so it is disposed of in the general waste container.
Single-use (PPE)	SPECIALIST COLLECTION or GENERAL WASTE	In some destinations, private companies may offer the opportunity to collect PPE and process it into other products. If specialist collections are not available, used PPE needs to be disposed of in the general waste container to avoid possible contagions, therefore, they are neither recoverable nor recyclable. Each destination is different and local regulations for disposing of PPE should always take precedent.

Glossary

TIL

Recyclable products

Recyclable products refers to products that are technically recyclable, meaning they can be diverted from landfill by being processed into new products or materials. However, just because a material is recyclable it doesn't mean it will **actually** be recycled. The ability depends on the infrastructure in the country/destination and on the recyclable products being separated and collected accordingly.

Recycled products

Products that are made of recycled content or contain recycled content, that has been recovered from the waste stream. Products containing a high percentage of recycled content are usually more sustainable than products made with virgin materials. It is important to continue to recycle these products after use so they can become new products and materials again and again.

Mixed material products

Mixed material products contain at least two different materials, e.g. juice cartons which are made of paper, plastic and aluminium and takeaway coffee cups which are made from paper with a plastic lining. It is very difficult to separate the layers, even with machinery, that is why these products have a very low recoverability and thus a very low recyclability rate.

Bio-based products

Bio-based materials (i.e. bio-plastic) are made from natural/renewable resources such as corn starch, potato starch or sugar cane instead of fossil fuels. Thus, the production of products made from these materials has a lower environmental impact than the production of products made from fossil resources. However, bio-based materials are not necessarily biodegradable or compostable, moreover, they are not necessarily better for the environment when their full life cycle is considered, and they may not decompose completely.

Biodegradable products

Biodegradable products can be made from bio-based materials or from fossil fuels, the word biodegradable simply refers to the fact that the materials decompose. Decomposition can be by microorganisms (e.g. bacteria) or by environmental surroundings (e.g. sunlight). During the process of decomposition, biodegradable material breaks up into smaller pieces over time, in some cases this can be years so discarded products can still pollute environments and harm wildlife, even when made from biodegradable materials. Biodegradable plastic made from fossil fuels breaks up into harmful microplastic particles if it is not properly disposed of.

Compostable products

Compostable products break down into natural elements and leave no toxins behind when properly disposed of in a composting environment. Compostable products are mostly non-recyclable. There are two types of compostable products: Industrially compostable products and home compostable products. Alas, most products are not labelled accordingly, thus you need to ask the product supplier if the product is industrially or home compostable.

If compostable materials end up in the plastic waste stream they can contaminate the recycling process so it is very important to separate them in advance.

Industrially compostable products

Industrially compostable products will not simply break down like garden waste when discarded in nature or onto compost piles, they require industrial facilities with specific conditions such as high temperature to actually break down. These products should be recognised by standards like the European standard EN 13432 as it ensures the product disintegrates after 12 weeks in an industrial compost setting and completely biodegrades after six months. Not all waste collection companies or facilities accept these products, thus you have to ask. If they are not accepted, it is recommended to avoid these products.

Home compostable products

Home compostable materials can break down when deposited into a compost pile as they don't require industrial conditions, a well-managed compost pile should be sufficient. As these conditions vary depending on the climate (in cooler climates the composting takes longer), you need to ask your local suppliers for further details on the composting. It may be that waste collection companies will collect home compostable products together with organic waste, this should be checked.

Traditional plastic products

Traditional or conventional plastic products are made from fossil fuels, their extraction and production consume a lot of energy and resources. Traditional plastic products are not biodegradable, they will remain intact for many years and will eventually disintegrate into smaller pieces, leaving harmful microplastics behind.

Aqueous coated products

Aqueous coating is water-based and thus breaks down without needing any special conditions nor harming the environment. Paper cups or takeaway containers with an aqueous lining can be put into a paper recycling bin if they are not heavily contaminated with organic residue, otherwise they can be industrially or home composted. The problem is that many paper recycling plants can't identify which cups have aqueous lining and which do not, so they often pull them out and don't recycle them. It is worth speaking to paper recyclers to explain about aqueous lined products to find out if they are accepted at the recycling facility.

PET = Polyethylene Terephthalate

PET is the most commonly used type of plastic worldwide and mostly used for soft drink/water bottles or food packaging. It is easy to recycle and is used to make more RPET bottles. The "R" makes it easy to identify that the material includes recycled content.

HDPE = High Density Polyethylene

HDPE is used for products like plastic milk bottles, juice containers, shampoo bottles and detergent bottles. It is easy to recycle and can be used to make garden furniture amongst other secondary products.

PP = Polypropylene

PP is often used to make single-use products such as plastic straws, disposable cups or bottle caps. It is generally easy to recycle although recycling is limited due to difficulties in collection. It can be used to make clothing fibres or food containers.

LDPE = Low Density Polyethylene

LDPE is used to produce food bags, shopping bags or magazine wrappings and squeezable bottles. It can be recycled though special facilities are needed in order to do so. When recycled it is mostly used to make bin liners or plastic furniture.

PS = Polystyrene

PS is often used to make single-use products such as coffee cups, plastic food boxes or plastic cutlery. It is very difficult to recycle, if it does get recycled it is often used to make more packaging.

References:

- EuRIC AISBL: Plastic Recycling Factsheet
- European Environment Agency: Biodegradable and compostable plastics
- Think Greener: Aqueous coating





Sources and further reading

Sources

1) IUCN (International Union for Conservation of Nature): https://bit.ly/2Z5RdBv

2) WWF: The Lifecycle of Plastics https://bit.ly/3cWSNOf

3 & 4) WWF report (2019): Stop the flood of plastic – How Mediterranean countries can save their sea https://bit.ly/3d3rv91

5) EU Joint Research Center Technical report (2017): Top Marine Beach Litter Items in Europe https://bit.ly/36VAup1

6) WWF report (2019): Stop the flood of plastic – How Mediterranean countries can save their sea https://bit.ly/2NRzV8N

7) IUCN (International Union for Conservation of Nature): https://bit.ly/2Z6rM2V

8) WWF report (2019): Stop the flood of plastic – How Mediterranean countries can save their sea https://bit.ly/2Z2TkGf

9) EU Single-Use Plastic Directive: https://bit.ly/3a4RIIB

Further reading

Futouris single-use plastic products spreadsheet: https://bit.ly/2Mqtj0T

Travel Without Plastic "Let's Reduce Single-Use" toolkit: www.travelwithoutplastic.com

Save The Med "Plastic-free Balearics": www.savethemed.org/en/

CleanWave.org: www.cleanwave.org

Greener Guest e-learning: www.greenerguest.com

Waste and Resources Action Programme (WRAP): https://bit.ly/3jzGLf0

WWF report (2019): Stop the flood of plastics – Effective measures to avoid single-use plastics and packaging in hotels https://bit.ly/3a8bv3L

Zero Plastic Waste toolkits by Searious Business: www.seariousbusiness.com/islands