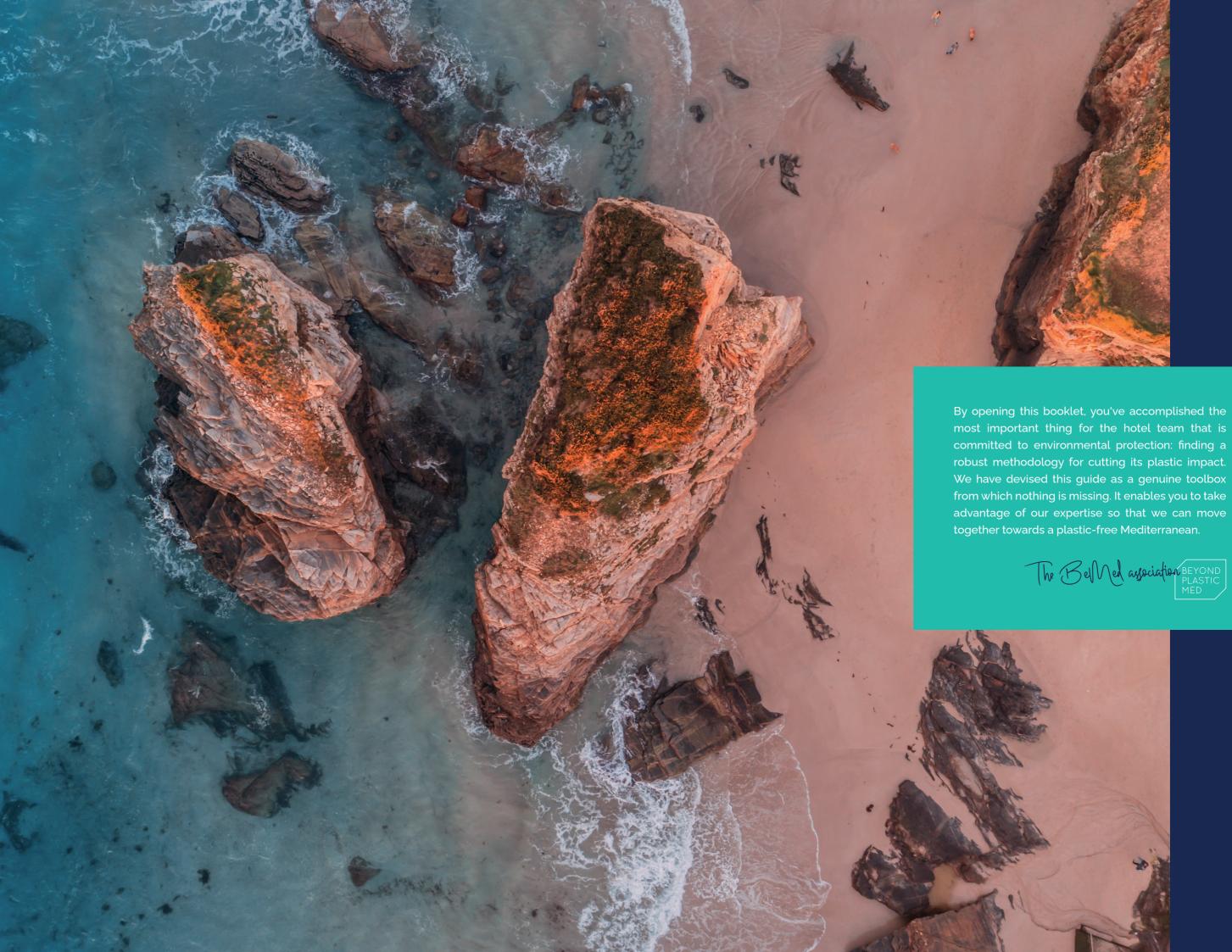
TOWARDS SINGLE-USE PLASTIC

BEYOND PLASTIC MED **TCRNKE** METHOD



The BelMed agrociation BEYOND PLASTIC MED

TOWARDS A ZERO SINGLE-USE PLASTIC HOTEL TURNKEY METHOD

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# WHY AND HOW TO TAKE ACTION

# A call to action

Climate change and loss of biodiversity are accelerating, intensifying and endangering planetary balance. Among the causes for which we can take action are methods of production and consumption, and the example of plastic speaks for itself. Indeed 460 million tons of plastic were produced worldwide in 2019¹, around a half of which was for single-use². According to the Ellen MacArthur foundation, unless we act straightaway, there will be more plastic than fish in the oceans by 2050³ (in terms of mass). The international community is therefore clear: all those involved, from the public and private sectors, at all levels and at each link of the value chain, are called upon to act globally and in coordination with one another to combat plastic pollution. In addition, an international treaty with regard to plastic is being discussed under the aegis of the United Nations.

The Mediterranean is far from being spared by this pollution: more than 229,000 tons of plastic waste are discarded into it, which is equivalent to 500 containers per day⁴. As well as this, the problem is exacerbated by the 30% increase in the production of plastic waste for the summer months⁵, coinciding with the height of the tourist season. However, despite the impact that the tourism sector may have on semi-natural coastal environments, this sector also relies heavily on their good condition. Preservation of locations, the natural beauty of destinations and customers' experience as tourists in the hotel industry are under threat from this pollution. Customers are also increasingly exacting with regard to the ecological credentials of the sector. As entities involved in the tourism sector, hotels therefore have a part to play in order to make their business durable.

This guide is intended for the hotel industry: for managers, for green and environmental specialists, for teams and their partners. It is a toolkit method for removing single-use plastics from their hotels.



The equivalent of 500 containers of plastic are discarded into the Mediterranean every day

¹ DE, Global Plastics Outlook, 2022

- ² UNEP, "Beat Plastic Pollution : Our planet is choking on plastic".
- ³ Ellen MacArthur Foundation, the New Plastic Economy Rethinking the future of plastics, 2016
- ⁴ IUCN, The Mediterranean : Mare Plasticum, 2020
- ⁵ WWF, Stop the Flood of Plastic : How Mediterranean countries can save their sea, 2019

⁶ Christian Rapp, TUI Group, "TUI global survey: Sustainable tourism most popular among German and French tourists", 7st March 2017.

⁷ Booking.com, Sustainable Travel Report, 2021.

⁸ International negotiations under the aegis of the United Nations are underway so as to form a global, binding agreement to tackle plastic pollution.

⁹ Good Planet Mag', "Tourisme/classement des hôtels : développement durable et numérique désormais pris en compte" (tourism/hotel classification: sustainable and digital development taken into account from now on), 31st March 2022.

¹⁰ Benraïss-Noailles Laïla, Olivier Herrbach, "RSE et marque employeur" in Jean-Marie Peretti et al., (Corporate social responsibility and employer brand) Une vision des ressources humaines sans frontières (a vision of human resources without limits), EMS Editions "Questions de société", 2018.

84% of travellers want to cut their waste







A genuine asset for recruitment



# WHAT ARE THE BENEFITS OF REDUCING PLASTIC CONSUMPTION FOR A HOTEL?

# A commercial act in response to customer demand

A survey by tourism group TUI shows that one European out of ten has already booked an environmentally-friendly holiday, and that more than ²/₃ of them are inclined to make compromises with regard to lifestyle in favour of the environment⁶. According to Booking.com and their survey among 29,000 travellers in 30 countries, 84% of them wanted to cut their waste production during their trip⁷; so how about helping them?

# An act contributing towards "the new norm"

A global dynamic tends towards regulations to tackle plastic pollution ⁸. And in the European Union, between now and 2040 all single-use plastics will be prohibited: the countdown has begun! From another point of view, some standards require the presence of certain individual products. But this contradiction tends to diminish: for example, the starred hotel classification grid changed in 2022 by doubling the number of criteria associated with sustainable development. And hotels must meet at least 13 out of 27 of them to obtain a star⁹. So how would it be if you became involved in getting them to change even more quickly?

# A gesture of commitment that shapes its name as an employer In a context in which recruitn

In a context in which recruitment is difficult, ecological commitment may form a significant argument among young people who are looking for responsible employers and meaning in the workplace. Work has already shown that the perception of corporate social responsibility was a key factor in the employer's brand, this having a major influence in the application process¹⁰. So, are you ready to go through those CVs?

# A gesture that is part of a global dynamic

The initiatives for a more environmentally friendly tourism sector are flourishing: an example is the Global Tourism Plastics Initiative, which is international in scope and which has many partners, Iberostar with its Wave of Change programme by way of an example on the scale of a hotel group, and the IUCN and its Plastic Free Islands project, by way of an example of support for NGOs. Your involvement will therefore not be an isolated gesture, and you will be able to benefit from feedback and the winds of creativity!

# A structured process

To reduce your plastic footprint, we propose a methodology with 6 main stages.

# General methodology:





These 6 major stages are part of a "project" approach which shapes itself over time. To help you plan your actions, here is a chronological view for information (Gantt diagram),

# Informational chronology of implementation of project:

Table	Time			
Tasks	T1	T2	T3	T4
<b>Specify the starting point</b> Clarify the objectives to achieve Carrying out the initial diagnosis of single-use plastics Understand the waste management system	•			
Prioritising single-use plastics to tackle Understand prioritisation straightaway Conduct each process Jointly approve single-use plastics to target		•		
Remove, reduce, replace: a look around the options Understand the issues with regard to use Remove, reduce before substitution Listing alternative solutions for single-use plastics to replace				
<b>Choosing the best solution</b> Assessing the feasibility and environmental impact of options Approving alternatives for testing and placing orders				
<b>Testing options chosen</b> Inform and train staff Envisage a simple and effective means of communication for your customers Test launch and assessment				
Gauging the impact of the test Specify key indicators Identify and collect the data required Interpreting results	•			

Occasional action, marker



Anticipated duration of task



Would you like to get involved? Here are our initial tips to give you as good a start as possible!

# With regard to project management

- Involve management and teams to seize the process, take decisions together and put \$ them into action.
- Appoint a project point of contact for effective coordination as the process calls on numerous **☆** hotel departments, and even on outside providers.
- Have clear and joint reverse scheduling within the project team so as to dedicate time to it, [☆ in the same way as the hotel's day-to-day activities.
- Take advantage of feedback to make progress more quickly and avoid difficulties already 公 identified by others.
- **क्र** Mobilise a network on whom to rely, key partners, communication channels.
  - Involve local authorities and other relevant bodies so as to integrate the project on a regional basis

# With regard to methodology

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Respect the hierarchy of waste and the "5 Rs"11: refuse, reduce, reuse, recycle, rot.

Adopt a cycle of life point of view: consider all the environmental impacts of the plastic product, from extraction of the material for its production to end of life management.

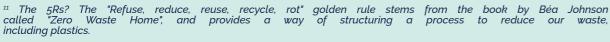
Look out for impact transfers: do not replace a product by a solution or a new practice that may have other significant impacts on the environment.

# A tested process: feedback from use by the InterContinental Marseille - Hotel Dieu

Within the framework of its Business Club, the Beyond Plastic Med association assisted the InterContinental Marseille - Hotel Dieu towards the removal of single-use plastics, via a pilot scheme over a period of a few months¹². Designed to provide a boost to form the basis of a lasting process, this project lends itself to feedback, as represented by this toolkit method intended for the hotel industry. In it, we shall show the methods used and the results, and we shall highlight the factors involved in success, as well as aspects of which to be wary that should be borne in mind. Designed to be freestanding, it is our hope that you will find it useful as a way of eliminating single-use plastics from your hotel! Designed to be scalable as the experiments take place, please feel free to contact us and let us know your thoughts!



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¹² BeMed, "Launch of operational test at the Intercontinental Marseille - Hôtel Dieu", 5th September 2022.

INTERCONTINENTAL MARSEILLE – HOTEL DIEU



# Main results

The InterContinental Marseille - Hotel Dieu experiment to gradually remove single-use plastics shows that, over 3 months, for the 18 prioritised products and packaging targeted¹³:





the production of waste was cut by 78% (by mass) Costs were down by 42% (for consumables¹⁴)

# Changes in the blink of an eye

Products targeted and alternatives tested over the course of the project.



¹³ Not counting the changes with regard to butter (inconclusive) and the minot kit (possible impact transfers). ¹⁴ Consumable: item that, once consumed, is destroyed and cannot be reused. For example, here, sugar and tea are consumables, but the sugar bowls and teapots are not.

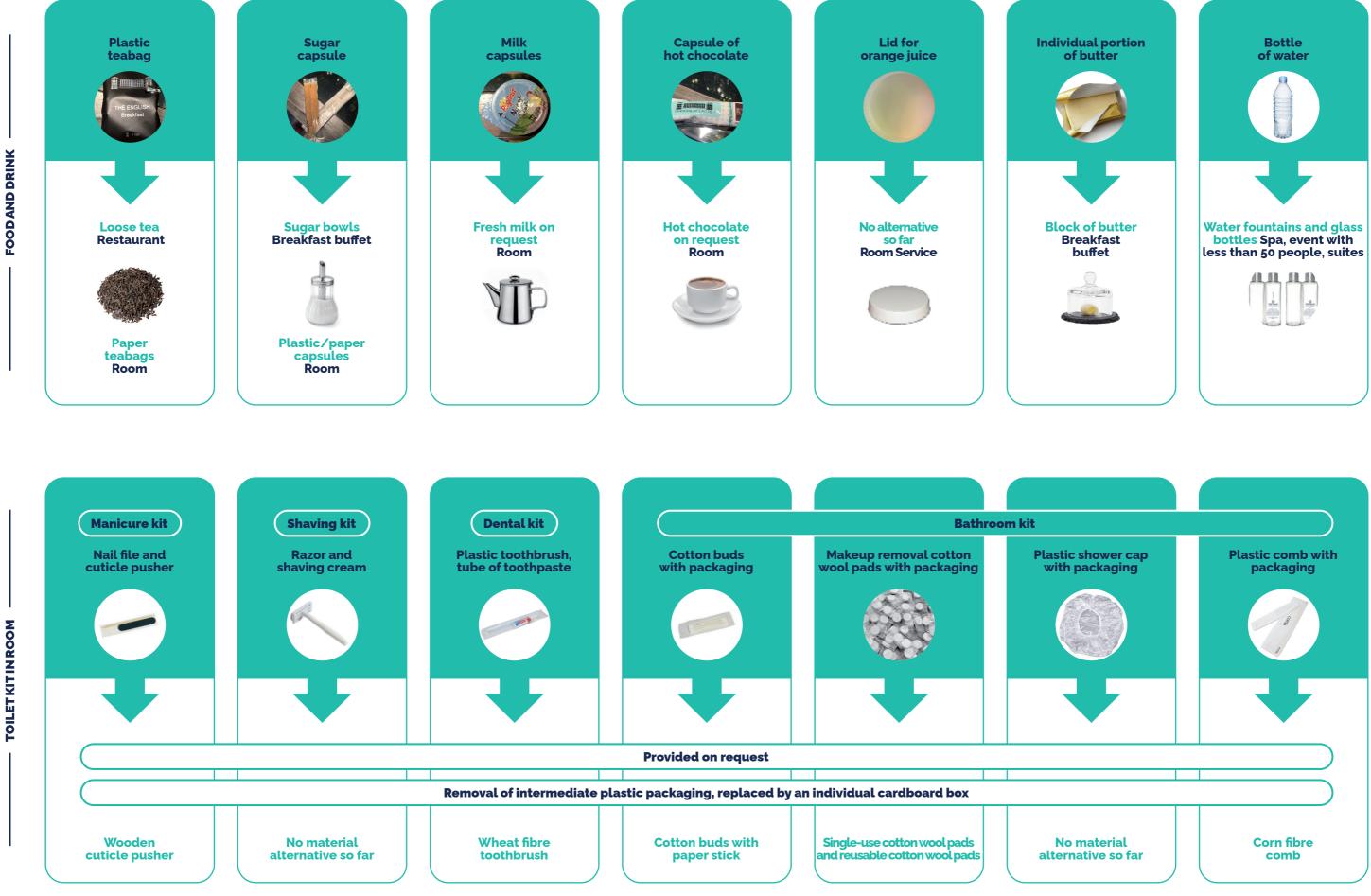
* Minot is a common term for children in Marseille and Provence.



staff became involved and saved time



Customers were still as satisfied with their stay



# Key messages

Cutting our consumption of plastic is a real possibility! And avoiding environmental impact transfers if the single-use plastic is substituted by another material is also possible.



For 18 products targeted¹⁵ by this test, 526kg of plastic waste was avoided over one year, which was a reduction in their use of 78%.



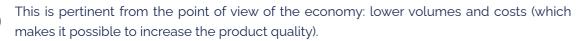
The environmental impact of the changes was examined, and it was positive on average.

# Promoting actions for removing or reducing single-use plastics is the most effective method.

Removing hot chocolate and milk capsules from the welcome tray by proposing home-made alternatives on request from room service reduced their consumption by 99%. Changing the bathroom kits to on request has cut their consumption by an average of 40%.



This is pertinent from the point of view of the environment: drastic cut in plastic consumption.



Ultimately it is saved time for staff and maintaining service quality as perceived by customers.

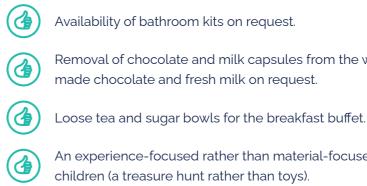
# Adopting re-employable solutions is profitable

Around 5,000 euros has been spent on re-employable alternatives such as water fountains, sugar bowls and teapots.

> It took only a few months to amortise these costs.

	Our disappointments
<b>(</b>	The lid of the juice glass for room service, whet use paper, did not fit the need (loss of quality af re-employable plastic, marks frequently found
	The self-service block of butter did not retain
<b>(</b>	The sweet dispenser at reception was a victin
	The shaving kit did not find a satisfactory repl

# Our guaranteed quick wins



## Our high-potential solutions



**ሪ**ጉ

Improving waste management, especially with source separation in the front and back office.

¹⁵ Not counting the changes with regard to butter (inconclusive) and the minot kit (possible impact transfers).

ether made of re-employable plastic or singleafter just a few washes for the ones made of on the paper ones).

n a nice appearance.

im of its own success.

placement combining practicality and cost.

Removal of chocolate and milk capsules from the welcome tray, replaced by hot home-

An experience-focused rather than material-focused approach with regard to presents for



# SETTING UP THE PROJECT



**To be mobilised:** Project Point of Contact and management team.

# SPECIFY THE STARTING POINT

Above all else. it is important to provide your project with substance by asking yourself three questions Why do you want to take action?

With regard to what (which products) can you take action?

What system of waste management does your action come under?

By specifying your objectives, by listing the Single-Use Plastics (or SUPs) present in your hotel and by understanding the waste management system around you, you will get to the starting point of your action. And you will be in a position to determine the project area and the means of implementation.

1

2

3

# **Clarify the objectives to achieve**

# "How much will that cost me?",

"Will the change be agreed to by customers and staff?"

These are certainly questions you will ask yourself! So to get started while taking into account the socio-economic context of your hotel, we propose that you establish clear objectives for the following three areas:

1

2

3

The environmental dimension: creating a net environmental gain (no major impact transfers), reducing the hotels plastic footprint.

The economic dimension: choosing duration of amortisation (ROI) of the costs of practical changes and alternatives (solutions replacing SUPs).

The social dimension: involving customers and staff in the process for a project that is shared, supported and accepted.

This will enable you to establish your position and legitimise the decisions you will have to take.

# Carrying out the initial diagnosis of single-use plastics

Ready to rediscover all the new aspects of your hotel? To produce a comprehensive list of the SUPs in the hotel, every area must be examined, in both the front office and in the back office; from rooms to offices to cloakrooms, and including the corridors.



Model of table

of diagnosis of SUPs

But what are SUPs considered to be? They are plastics that are used just once before being discarded. A SUP product may itself be contained within an item of SUP packaging: so view them as a unit, as a group to be questioned! You can conduct your initial diagnosis using a table, which will form a work basis for what happens afterwards. The list may easily include more than 50 SUP items.

# Information to collect during diagnosis for every SUP:



the approximate volume consumed over one year (or a given period which will serve as a reference)

who uses this SUP and why?

## This status report will serve to identify the SUPs to deal with as ty (see step 2).

 $\mathbf{Q}$ **OUR TIPS** 

Specify precisely the name of each product and link a photo to all of them (eg. does the bathroom kit include the manicure kit? Rigorous classification will facilitate the next part!).

Look towards comprehensiveness in your diagnosis: consider both the back and front office, all ranges of rooms, plastic packaging (eg. around slippers), small items of plastic that may go unnoticed (eg. elastic bands, tamper-evident labels).







# **1.3** Understand the waste management system

To carry out a coherent action, you need to understand the end of life of SUPs within the local context of waste management. Are they separated in the hotel? Who collects them and what do they become? Are they burned, put in landfill, recovered? This will enable you both to find ways to improve the current system (eg. installing a separation system at source) and have all the information necessary for making informed decisions when faced with options. For example, if a cigarette butt collection and recycling procedure exists or is being developed in your region, by separating this waste at source you have assurance that it will be recovered. Contact your local authority and/or your collection and recycling service provider to ask them all these questions!

6

5





# SETTING UP THE PROJECT



**To be mobilised:** Project point of contact, people from each department and management team for 2.3.

# PRIORITISING SINGLE-USE PLASTICS TO TACKLE

With clear objectives. a comprehensive diagnosis and full understanding of the local waste management system, you have all you need to tackle the second stage. Because the diagnosis is comprehensive and provides you with a complete view of your use of plastics, you may have the feeling that the task is an enormous one. Why not sequence the process over time to gauge the means and the work done? This is what we recommend, with a toolkit methodology that enables you to select plastics to be dealt with as a priority, because they are easy to eliminate and/or they have a major environmental impact.

# 2.1 Understand prioritisation straightaway

The method proposed means the context of the project promoter can be taken into account and cost-effectiveness can be optimised, especially with regard to reducing environmental impacts.

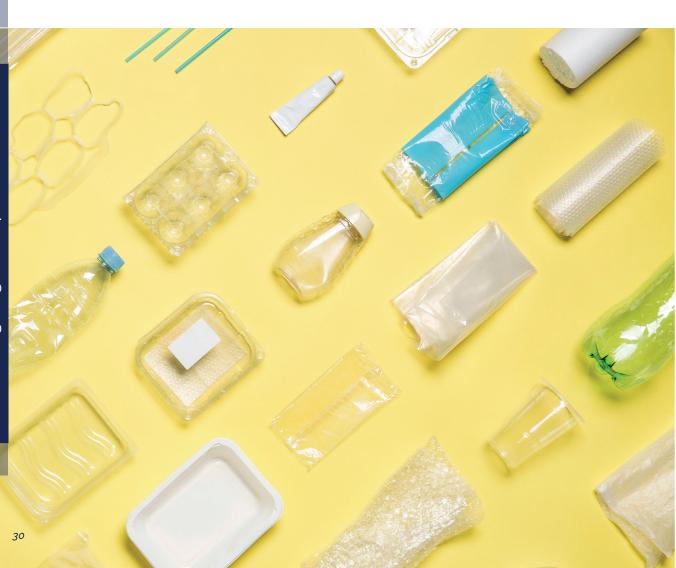
It enables 2 lists to be created:

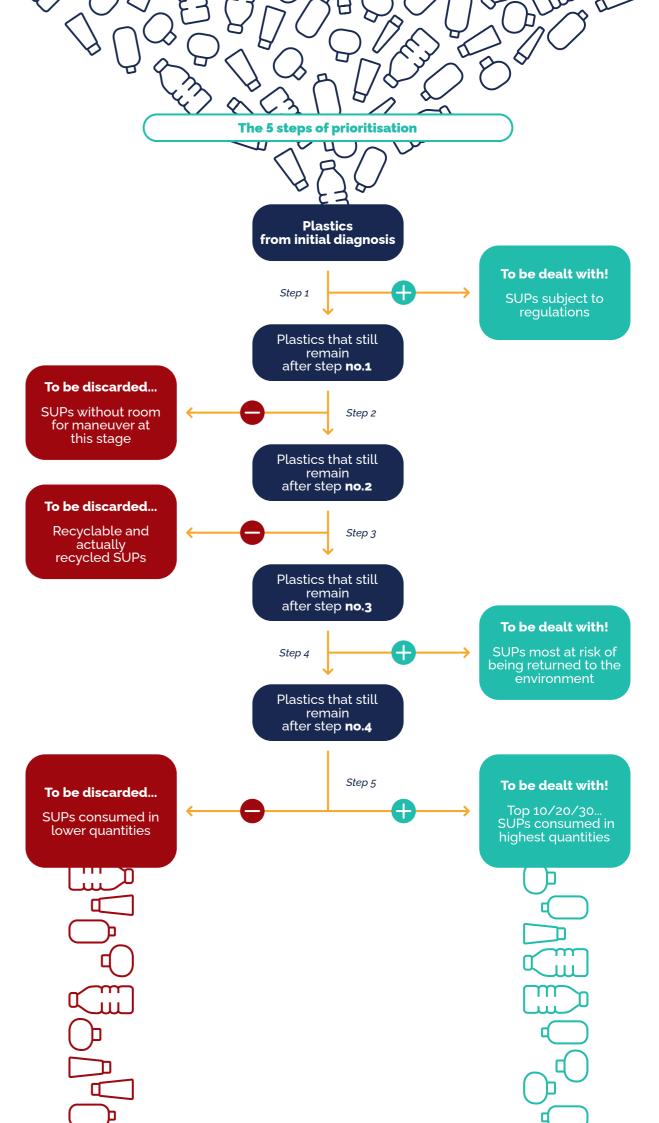


(2)

One "list of Single-Use Plastics (SUP) to process", on which you will focus your attention;

One "list of SUPs to discard" with which you will not continue working (or not right away!).





 $\bigcirc$ 

# **Implement** each step

1

(2)

# Include the SUPs for which an action is mandatory,

as some plastics are subject to regulatory prohibition or forecasted to be prohibited¹⁶

Eliminate the SUPs for which no action is possible.

For some plastics, you may have no or very little margin for maneuver in the short term (eg. commitments already undertaken with your suppliers). Before rejecting them, make sure you really have no leverage! For example, with regard to the requirements of the group to which you belong perhaps, have you considered asking for an exemption? Position yourself as a pioneer and ask for exemptions: you will enable your group to develop its practices and reinforce its impact!



Model of request for exemption from standards

## THE CASE OF THE INTERCONTINENTAL MARSEILLE

# **Obtaining exemptions**

Remove bathroom products and make them on-request? This seemed to them ambitious, pertinent but not very realistic given the standards of the IHG group. A request for exemptions and a few weeks later it had become reality! In fact final or temporary exemptions have been granted for making the following available on request i/bathroom products, ii/milk and iii/hot chocolate (via room service).

# Eliminate SUPs for which an action is not prioritised.

Some plastics are recyclable and actually recycled. If they are separated in your establishment and collected, it means you need to be sure that there really is a recycling procedure for this plastic in your region. If there is, it means these are therefore not prioritised, and you can eliminate them from your selection.

4

Include SUPs with the highest risk of escape into the environment. You can ask yourself these two questions: Does this plastic have a "travel use", ie. a strong likelihood of leaving the hotel depending on practices that are known about?

Does it have a "proven risk of escaping into the environment"? This means the plastics most commonly found on beaches, such as removable plastic parts, small, light plastic items of little value found and/or used outside. You can then include in the list of plastics for processing the ones that respond affirmatively to one or other of these questions.

# $(\mathbb{Q})$ CLOSEUP ON

# waste items most commonly found on the beaches

It is difficult to establish a correlation between waste plastic found on the shore and products present in a particular establishment. However, cleaning our shorelines shows us that along France's Mediterranean coast, cigarette butts, food packaging and bottles are the waste matter most commonly found on the beaches^{17 18}. The Surfrider association publishes a report on the subject every year here.

5

Include the SUPs consumed in greater quantities. For maximum impact, you can include the top 10, 20 or 30 etc. of the plastics most consumed in your establishment - and discard the others.

¹⁶ For example, European directive 2019/904 of 5th June 2019 includes banning of single-use plastics by 2040. In France, the AGEC law of 10th February 2020 transposed this directive and imposed a gradual phasing out of SUPs. For example, from 1st January 2022, sale of non-biodegradable plastic teabags was banned.

¹⁷ Surfrider Foundation Europe, Bilan environnemental des initiatives océanes 2018, 2018 (Environmental assessment of ocean initiatives 2018).

¹⁸ MTES (France's ministry of ecological transition), Bilan National du Recyclage, 2022.

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# 2.3 Jointly approve single-use plastics to target

After the process of prioritisation above, either the number of SUPs for processing is suitable for you, or it is still too high. In the first case, this step will enable the choices to be approved jointly, and in the second, it will enable the final selection to be made. This is the opportunity to involve the hotel staff to the greatest possible extent. The criteria that can be examined by the group are economic criteria, criteria with regard to agreement by customers and criteria involving logistics or internal organisation. Some plastics can then be withdrawn from or added to the list.



We often have preconceived ideas about what customers may accept or not accept. Allow yourself the opportunity to test and welcome your customers' opinions before making your decisions! Our experience at the InterContinental Marseille - Hotel Dieu showed that changes put into effect (though deemed major by staff and management at the hotel) went unnoticed by customers (**see 6.3 Interpreting results**)

At the end of prioritisation, the overall coherence of selected products and packaging needs to be checked so as to be credible as far as customers are concerned (eg. making toothbrushes and toothpaste available on request but making cotton wool and nail files freely available could make the process less credible).





# SETTING UP THE PROJECT



**To be mobilised:** Project point of contact, people from each department.

# REMOVE, REDUCE, REPLACE: A LOOK AROUND THE OPTIONS

You have chosen the plastics that you want to remove as a priority. It is now time for action! The purpose now is to understand the needs which these products and packaging meet in order to remove non-essential Single-Use Plastics (SUPs), to reduce consumption of other ones and to replace those you need with alternatives with less environmental impact.

# 3.1 Understand the issues with regard to use

To steer the search for alternatives, the issues with regard to use need to be understood: why and how did this plastic get there?

To answer this question, speak to staff from the departments concerned, who may be able to help you track the past of the SUPs and follow their journey closely, from entering the hotel to leaving it. It is important to see or understand who interacts with the item at each stage, with regard both to customers and staff.

## Standard questions:

In which areas is this plastic present?

- How is it supplied?
- ?) Who handles it?

(?) н

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How is it used? (eg. provide details about use for each of the areas in which it is present)

- What needs does it serve? (eg. a need with regard to the hotel's range or the group's range, health, single serving)
- How is it discarded or separated?



Record all the information collected about the selected plastics, and if possible refer back to data pertaining to orders (stock ordered and remaining stock, prices, weights etc.) to facilitate the later stage of impact gauging.

# 3.2 Remove, reduce before substitution

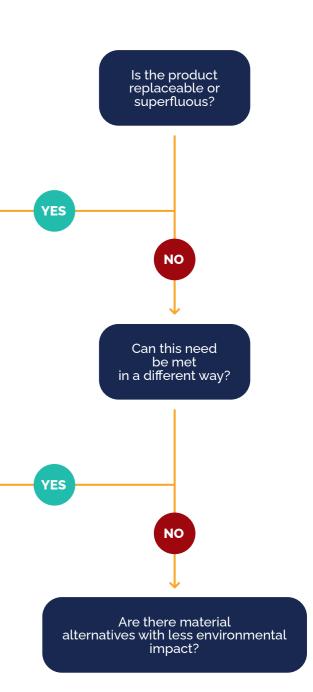
Before starting to search for alternatives, allow time to analyse all SUPs, starting from the initial need each one serves. Then ask yourself whether it can be removed, or its use reduced (eg. moved to "on request"). Removing or reducing is far and away the most effective way of lessening your environmental impact, while enabling savings to be made! At the InterContinental Marseille - Hotel Dieu, making items from the welcome tray and bathroom kits available on request has lowered their consumption by an average of 50%.

Here is a simple and effective decision tree for if possible:

It can be removed or made optional

It can be replaced by a service or a <u>chang</u>e in approach

# Here is a simple and effective decision tree for always promoting removal and reduction



## **m** THE CASE OF THE INTERCONTINENTAL MARSEILLE

# Hot chocolate pods in the room

Needs that they meet: drinking a hot chocolate, for immediate use on-site. Functions of packaging: conservation, hygiene. Handling: ease of handling for staff. Use of capsules: customers help themselves, with a serving which is pre-specified by the packaging itself.

# Can these needs be met differently?

Our example: remove capsules and provide a hot chocolate through room service.

Feedback: reduction in plastic, high-quality drink, hygienic conditions, few requests in summer and less customers in winter, so no overload for service staff.

Co-benefit: cut in workload of cleaning staff, who do not have to check and replace used capsules.

# "Against all expectations, the test showed that the movements of room service staff bringing drinks to rooms are totally manageable."

Marie-Aude Tulpain, head of catering at the InterContinental Marseille - Hotel Dieu





# Good practices that are easy to implement for health products

If they have to be present and/or you have not been given an exemption, put them: Far from the washbasin to make sure they don't get wet if they are not used. In a drawer or high up to encourage customers to use their own products.

# Listing alternative solutions for single-use plastics to replace

If its use does not allow for removing or reducing SUPs, you can give thought to solutions involving re-employing or substituting the material. This therefore means considering the range of possible ethical alternatives, which should be preferably local too. Various alternatives to SUPs can be noted and entered in a table.

# Information to collect for each alternative:

What is the type of alternative specified? What is it made of?

What change of experience does it represent for the hotel and for customers?

What will it be used for?

What will happen to the alternative at end of life and how will it be managed? If the material alternative is destined to become waste, you need to check whether a satisfactory recycling and recovery option exists.

Who are the suppliers and where are they based?



?

?

?

?

original product?

# decide on the most suitable solutions!

 $\odot$ 

- Only provide them when requested or provide them as an option when the booking is made.





Model of benchmark table of alternatives and suppliers

How much does the alternative cost and what is the price difference compared with the



# **OUR TIPS**







# SETTING UP THE PROJECT



**To be mobilised:** Project point of contact, management team and people from each department.

# **CHOOSING** THE BEST SOLUTION





Budget: S Call for an external service for environmental assessment + ordering alternatives

# You're nearly there!

Q

To select the most appropriate alternative solutions, you now need to take into account the environmental impact of solutions by comparing them against each other and against the initial products. And of course don't forget about considerations with regard to social and practical acceptability either (customers and staff), as well as economic considerations.

# Assessing the feasibility and environmental impact of options

# a. Specify together the appropriate alternatives for your hotel

You now have the information required: description of the alternative, possible suppliers, theoretical end of life, cost of alternative. You can now narrow down the list (if necessary) by applying internal criteria (feasibility of set up, perception by staff and customers, costs etc.) and only select the most appropriate alternatives for your own situation. This work involves various people (management, departmental heads, environmental appraisers, the hotel group etc.), each of whom has a different viewpoint. Remember that a test phase is planned to gauge the feasibility of deployment and acceptability by customers. There will still be time to go back if the alternatives turn out not to be viable.

## b. Assess the environmental impact

To check the environmental suitability of alternatives compared with the original Single-Use Plastics (SUPs) and thereby avoid transfer of environmental impacts, a scientific and technical assessment is required. An initial assessment of quality, comparing the different alternatives against each other and against the original SUPs may be conducted to orientate the decisions for selecting alternatives. In the case of the InterContinental Marseille - Hotel Dieu, a French ESQCV life cycle assessment matrix was developed by science partner AMVALOR. Ideally this will be followed by a more precise quantitative environmental assessment with regard to certain products for which there are still major uncertainties, by referring, for example, to simplified life cycle analyses. It is strongly recommended that you consult an authorised service provider to carry out this stage.

- The product/packaging material: type of polymer (eg. polypropylene, polyethylene etc.), of ? additives used, its mass
- ? producer and supplier
- ? washing conditions

? Processing after use: recycling, household rubbish etc.

# $\bigcirc$ CLOSEUP ON

# The methods of environmental analysis

Environmental analysis tools are used in eco-design, during the upstream phase, to compare various solutions against each other in terms of environmental impacts. They provide indications about different categories of environmental impacts (greenhouse gas emissions, water pollution, impact on human health, exhaustion of resources, production of waste etc.), all while taking into account their whole lifecycle, namely from extraction of raw materials, production, distribution, use and end of life ("cradle to grave").

France's ESQCV method (simplified and quality-based assessment of lifecycle) is shown as a matrix making it possible to gualify, as determined by an expert, the degree of impact of the product on each phase of the lifecycle with regard to a few environmental criteria identified as pertinent for the product. It provides some initial enlightenment with regard to significant environmental aspects of SUPs and their alternatives without having to resort to detailed collections with regard to the lifecycle of the product.

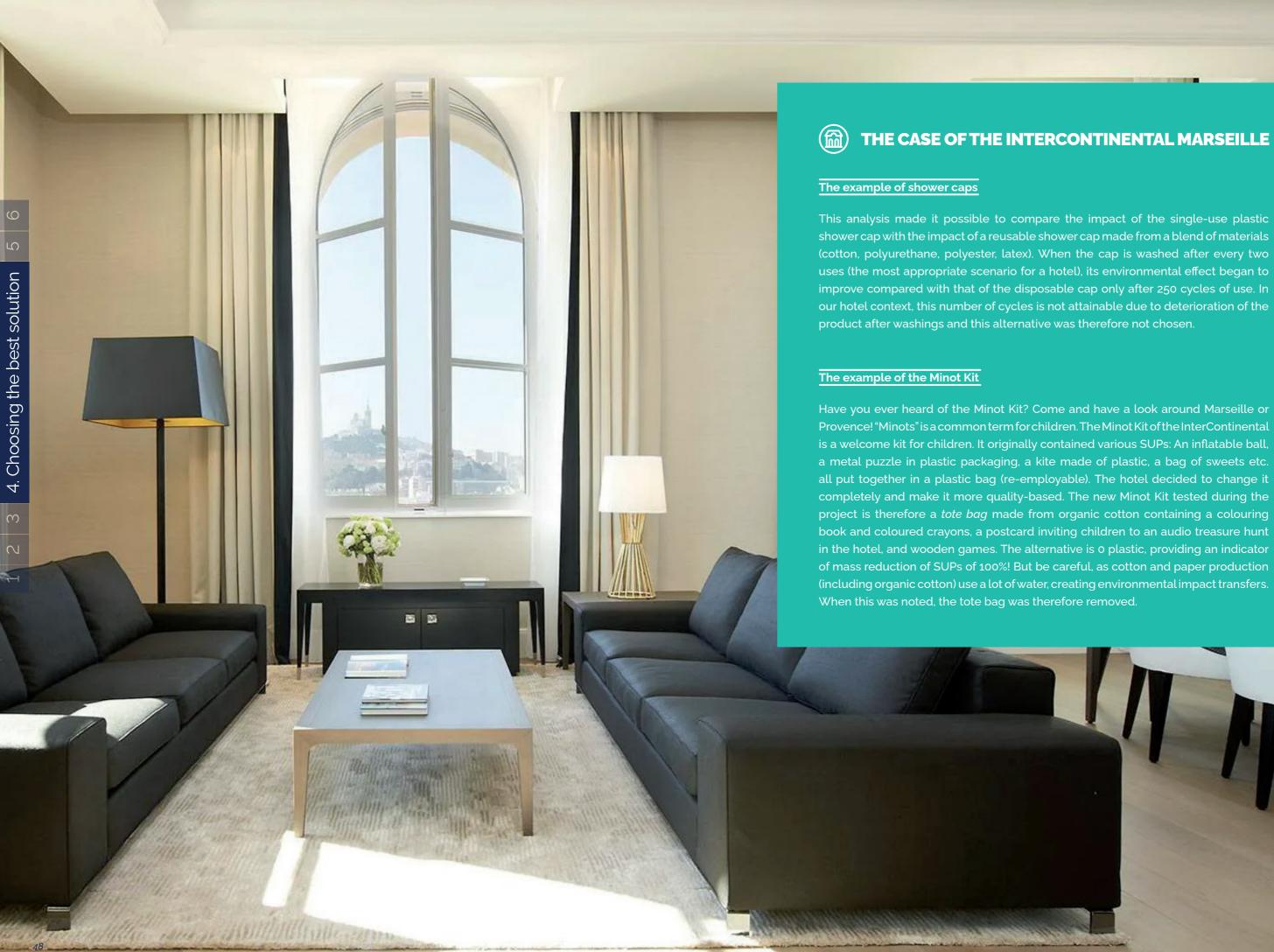
A simplified analysis of lifecycle, meanwhile, enables a more precise quantitybased comparison. It enables awareness analyses to be conducted while varying, for example, the number of re-employment cycles.

These methods are not perfect, they do not yet, for example, take into account the impact of the product if it ends its life in the environment but they provide good indications. They continue to be an orientation tool for internal choices, but the robustness of their results does not authorise external communication.

Information that may be asked of you (some needs to be collected from considered suppliers):

Logistics: what type of secondary or tertiary packaging, quantity of packaging, location of

Uses: life duration of product, possibility of re-employment or reuse of product, use scenario,



# The environmental impact of the alternatives: simplified results

For the alternatives to SUPs that are still single-use (change of material):

For the alternatives to SUPs that are no longer single-use:

		Product concerned	lr n
4. Choosing the best solution 5 6		<b>Toothbrush</b> (from China)	P
3 4. Choosing t	X	<b>Raser</b> (from China)	P
2		Bathroom products	С
		(from China)	pa

Product concerned	Initial material	Material exa- mined as an alternative	Degree of im- pact		Initial product	Alternative examined	Degree of impact			
		Wood (from Oise, France)	Reduction				Tube of shaving cream (20ml)	Refill + pump (100ml)	Reduction	
Toothbrush	Delverendère	Polypropylène +	Status quo		Butter (individual 25g portion)	Butter (500g block)	Reduction			
(from China)	Polypropylène				Intermediate plastic packaging	Removal of intermediate plastic packaging	Reduction			
		Polylactic acid (from China)	Up s		Single-use cotton	Re-useable cotton (washable after each use and more than 3 uses)	Reduction			
<b>Raser</b> (from China)	Polystyrene	Polypropylène + wheat fibre (from China)	Status quo		Single-use shower	Reuseable shower cap made of 50% cotton and 50% blend of polyester, polyurethane	Up			
		Polylactic acid (from China)	Up Up		cap (polyethylene)	and latex, washed after every use and used less than 250 times				
Bathroom products (from China)	Cardboard packaging	Mineral sachet packaging (from China)	Slightly down							
Sugar capsule	Low-density polyethylene	Paper	Reduction			IDC				

The degree of impact is assessed with regard to four categories of damage¹⁹: Climate change, human health (ionising radiation, formation of photochemical ozone, fine particles), water pollution (acidification, eutrophication of freshwater, eutrophication in the marine environment, terrestrial eutrophication) and exhausted resources (water use, use of non-renewable resources).

## **OUR TIPS** (¥)

Only careful environmental analysis (by authorised experts) can ensure that the situation reached will be better than the one you left from. This analysis is vital for ensuring the robustness of the process with regard to the environmental impact.

¹⁹ Definitions of indicators are found in the glossary.



## $(\mathcal{O})$ **A FEW POINTS TO WATCH OUT FOR**

The re-employable alternatives are only meaningful with a reasonable loss/ breakage rate, and a minimum number of cycles of use.

The following constraints recur when alternatives are being selected: food security, hygiene measures, the risk of breakage associated with using glass, logistical organisation, practicality for staff, maintenance of quality, customer experience. Preempting these is a first step towards overcoming them!



## B **AND SOME FALSE GOOD IDEAS**

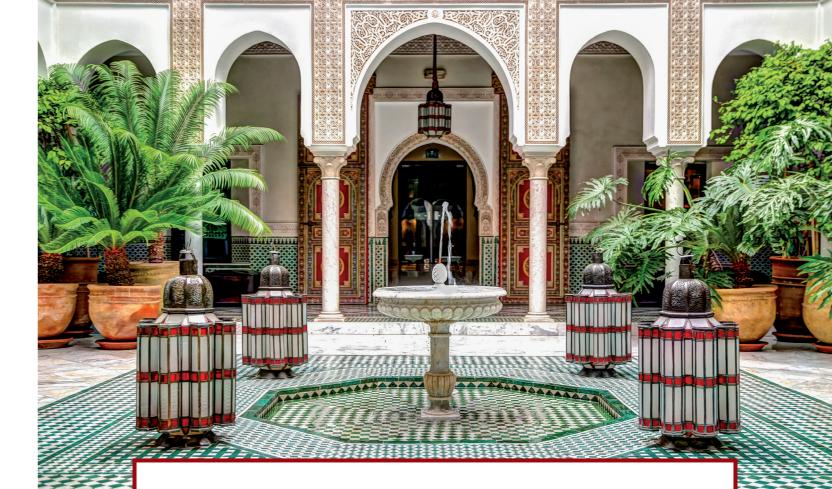
Caution: just because you use a piece of biosourced plastic²⁰ it does not mean that its environmental impact is necessarily better than a petroleum-based plastic²¹. It needs to be checked. And a biosourced plastic is not necessarily biodegradable²²!

If there are no waste separation solutions in the various spaces within your hotel, recyclable solutions to single-use have limited meaning from an ecological point of view. In this case you can consider establishing separation at source in different places in the hotel (selective bins depending on waste type), after having checked for the existence of suitable recycling facilities.

# Approving alternatives for testing and placing orders

When these stages come to an end, cross-reference the results of the environmental assessment and of your internal criteria so as to select alternatives for testing in the hotel. Depending on the size of your hotel and on its administrative operations, allow at least a month for decision-making by management to take place.

When the final list of alternatives is approved, check and specify your suppliers, your estimated volumes for the test phase and start making your orders!





When the final choice is made, a change against the alternatives submitted for environmental analysis can alter its conclusions...

If you choose a given alternative and you change supplier compared with the alternative submitted for environmental analysis, make sure the location is similar or closer to your hotel.

If you choose a given alternative and you change material compared with the alternative submitted for environmental analysis

Either a comparative analysis has been made for this type of material for another alternative, and with a view to simplicity you assume that the results can be transposed;

Or you would need to restart the comparative environmental analysis - this is more rigorous but costs more money

²⁰ Produced using biomass, for example corn starch, sugar cane, co-products of agriculture. ²¹ Produced from oil.

²² "Bioplastics" are a large category bringing together both bio-sourced plastics and biodegradable plastics. For further infor-mation, **please look here**.

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## THE CASE OF THE INTERCONTINENTAL MARSEILLE

# Example of applying the process : tea bags

The individual plastic tea bags were initially present in bedrooms and at the breakfast buffet.

## 3.1 Understand the issues with regard to use

In rooms: the hotel makes tea bags available for customers so they can make tea at any time of day or night. The consumption rate continues to be low. Room maintenance is done through sub-contracting, which limits the flexibility of staff actions (protocols). The tea bags solve an issue involving shelf-life and hygiene, and staff do not need to change the tea between customers. In the restaurant: the hotel provides a high-quality range of tea bags for breakfast. Staff need to restock the buffet regularly to ensure there is enough tea to last over the breakfast period.

3.2 Remove, reduce before substitution then 3.3 List the alternative solutions for the SUPs to replace

List of alternatives to plastic tea bags:

	Benefits	Drawbacks
Loose tea and tea infusers	No waste, better quality tea than teabags	Handling tea infusers, less practical, risk of spillage
Loose tea and reusable bags	No waste	Not very practical with regard to managing reusable teabags (collecting and washing) Difficult to maintain the white colour of the bags.
Paper teabags	No change of use for hotel or customers, reassuring with regard to hygiene, practicality of units	Presence of waste (but not plastic waste)
Compostable capsules and tea machine	The compostable end of life of capsules is better than that of plastic bags if the capsules are actually home-compost certified and actually collected.	Investment: purchase of machine. No composting process for capsules. Lower quality tea than bags. Cleaning.
Paper capsules and tea machine.	The end of life of paper capsules is better than that of tea bags.	Investment: purchase of machine. Lower quality tea than bags. Cleaning.

# 4.1.a : Specify together the appropriate alternatives for your hotel

were deployed:

paper tea bags in the rooms to limit the work of cleaning staff, and loose tea for the filter teapots owned by the hotel for the breakfast buffet.



Use of the hotel's teapots was suggested during a joint meeting attended by the catering department. It was not identified upstream as the benchmark of alternatives was first presented to interlocutors who did not have a full overview of operations. This example demonstrates the importance of dialogue between the people involved in the project!

4.1.b: Assess the environmental impact then 4.2: approving alternatives and placing orders With the two options showing an environmental benefit, the alternatives were ordered and



Due to the different uses in rooms and at the breakfast buffet, two separate alternatives



# SETTING UP THE PROJECT

# 

**To be mobilised:** Project point of contact, procurement and operations manager for implementation and monitoring of test, all teams of the hotel for rolling out the hotel process and being ambassadors for it.

# TESTING OPTIONS CHOSEN

# So you've placed your orders? Excellent!

You can prepare the ground for the test phase during the time your alternatives take to arrive (by opting for local networks, this shouldn't be long!). Test the alternatives over a particular period, eg. 6 months, which will give you time to collect all the elements required for clear decision making, before rolling out a lasting and efficient process for removal of Single-Use Plastics (SUPs). To stack all the odds in your favour during the test, we recommend that you do not under-estimate the importance of the information and training of staff, of communication for customers and of systems for assessing the process.

# **.1** Inform and train staff

Involving all the staff may appear ambitious and costly, but it is one of the keys to success. Indeed it is they who will actually implement the changes. Inform them of the principles of its process (see **1**. Specify the starting point), sound them out about the most problematic SUPs (see **2.3** Jointly approve the single-use plastics to be targeted), understand their role in use of SUPs (see **3.1** Understand the issues with regard to use), take their opinions into account with regard to feasibility of rolling out alternatives (**4.1.a** Jointly identify the alternatives relevant to your hotel), which means recognising their work and trusting them in respect of developments to introduce collectively. Involving staff as early on as possible means maximising commitment and the chances of a successful outcome.

The very beginning of the test launch is a good opportunity to re-brief everyone, to discuss changes to protocols and organise specific technical training if necessary. Whether you organise an ad-hoc meeting, or leave things to the department heads does not really matter, the idea being that the staff are ready to roll out the alternatives.



Take this as an opportunity to promote your environmentally-friendly process! During the training for new protocols, point out your ecological commitment to provide meaning to the actions of everyone and carry on involving them. Raising awareness among staff about environmental issues may help them to adopt the process.

# (A) THE CASE OF THE INTERCONTINENTAL MARSEILLE

# **Staff training**

Just before establishing the alternatives to SUPs, a training day has been organised to: **raise awareness among teams** with regard to the hotel's transition to zero plastic, **present the products** involved in the pilot project and the alternatives chosen, **respond to questions** from staff about the project and take onboard their opinions, expectations and concerns.

Training took place in the café area for staff. All teams pass through here when they have a break, have lunch or have dinner before their shift.

"Training has helped us to have a global view of all the alternatives rolled out in the different areas, and to easily include the process of environmentally friendliness in our discussions with customers "

Chadi Antoine Hachem, head of accommodation at the InterContinental Marseille - Hotel Dieu



# Envisage a simple and effective means of communication for your customers

The staff are ready. And what about your customers? They must be ready too! As a reminder, 72% of travellers believe that we must act now to protect the planet²³. This project can be seen as an opportunity to affirm the ecological approach of your trademark. Your customers expect just one thing: carrying out ecological actions that they do at home when they are in a hotel. So show them that their hotel has understood, as they have, the challenge with regard to the planet in our time and invite them to discover your ingenuity. For example, you can include with your communication media information explaining what happens to each product removed or replaced. Or use "nudges"²⁴ to gently encourage a particular type of behaviour.



Building a coherent ecosystem of communication is a craft, and it is also subject to work and studies involving information and communication sciences. Make sure you surround yourself with experts in the field to provide the right tone and the most suitable methods!

This may seem obvious, but remember to be cautious about goodies and laminated communication tools (except for the purposes of protection to extend their lifespan).

## $(\mathcal{O})$ A POINT TO LOOK OUT FOR

False good ideas also exist with regard to communication! Wanting to use messages such as "75% of customers agreed to..."²⁵ while customers of a luxury hotel expect instead to be unique; including dynamism with "Heading for a 0 plastic hotel!" while travellers would rather put down their suitcases than once more be "on the road"... Being assisted by researchers and experts in information and communication sciences is a really valuable asset!



## Approach and communication tools

The hotel has worked with researchers from the IMSC (Mediterranean institute for information and communication sciences) to define the most suitable communication strategy. From a methodological point of view, communication is a tool that may be used at 3 levels: to spread the word about the environmentally responsible processes of the hotel and thus develop a positive image of the hotel among its customers; to get past any resistance to change among customers; to assist customers' choices (towards choice architecture)²⁶

In our case, the customer did not have a choice (eg. the hotel replaced teabags with loose tea), and it was therefore a communication of change that was specified. It was built on an educational and positive tone to make the change accepted and to provide a company image that showed ecological responsibility. Key messages were therefore placed in areas in which product changes occurred, by including them in pre-existing media as often as possible (eg. welcome booklets, general signage in rooms etc.).

Each message was short, mainly given a "practical" angle, eg. for the breakfast buffet: "Committed to a process of waste reduction, the InterContinental Marseille -Hotel Dieu has blocks of butter, a sugar bowl, and loose tea to avoid using single-use plastic." Every message comes with a QR code which refers to an article containing elements of context and explanations about changes for those who want to know more. A satisfaction questionnaire comes with it, to take account of any feedback.

## ²³ Booking.com, Sustainable Travel Report, 2021.

²⁴ The nudge approach is an approach used in behavioural science to encourage people to take a particular decision, it is a "little help" without looking to force them. In other words, it means "changing people's behaviour in a foreseeable way, without prohibiting any option" (Velmuradova Maya, Les Nudges: mieux comprendre leur approche dans un contexte EEDD, Fertiles Collab's).

²⁵ Typically it involves a nudge based on the cognitive bias of social proof: we usually think that when a large number of people do something, it must be the best option to follow.

²⁶ Typically, if the customer is in the bathroom, he can choose between asking for the kit at reception or not. Suitable communication, by using nudges, can suggest to him not to ask for the kit at reception. Communication facilitating the architecture of choice occurs only in cases where the customer can choose between two types of behaviour.

# **Test launch and assessment**

So communication media for customers are set up, staff are trained with regard to new protocols and you have received what you ordered? So now it's time for practical set-up and the test launch!

During the test, you will actually be bringing theory and practice face-to-face, and will probably need to adjust things as time goes by. As far as logistics are concerned, malfunctions will be easy to spot via feedback from staff and through observation. However, with regard to acceptability by customers, you will have to establish a system of satisfaction monitoring, eg. through a specific questionnaire or one or two questions added to your satisfaction questionnaire.

# THE CASE OF THE INTERCONTINENTAL MARSEILLE

# An unfruitful case, that of the juice cutlery

The hotel had to use single-use plastic lids, used by room service to protect glasses of fruit juice, and was looking to change to re-employable lids. The washing stage turned out to be unfruitful, as the lids stopped looking good too quickly. The hotel then suggested testing a paper lid. Unfortunately, too often the lid arrived at the room with juice marks visible from being carried on the trolley. Sometimes you need more time to find an alternative solution, and testing means you can make progress!

No-one knows better than you what the actual rollout of alternatives involves, so we don't have any specific advice to give you, except to properly prepare your process of monitoring and assessment.

At the end of the test, you will want to assess the impact of the project, to find out what you want to want to continue using and what you want to change or improve. To do so, you need to specify the indicators to monitor throughout the project. These indicators need to be identified before implementing the test, to ensure that they will be properly gauged during it. Part 6 helps you define on a step-by-step basis the indicators and their analysis.

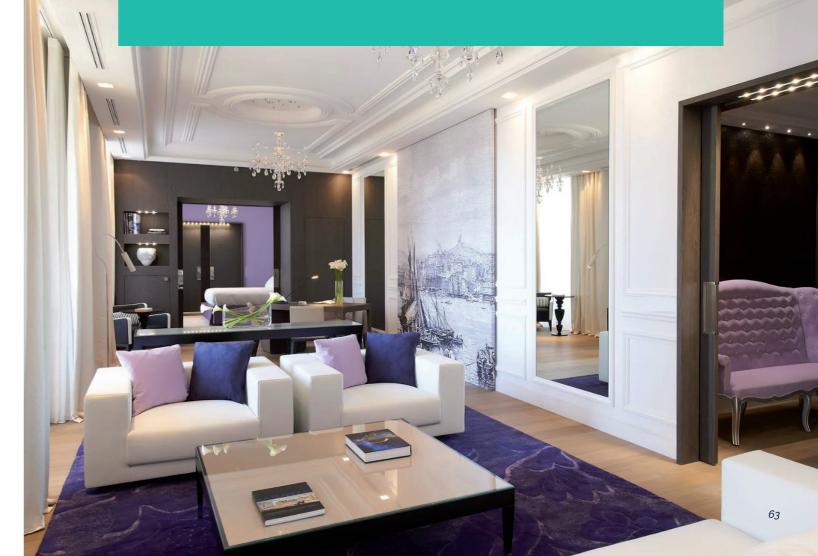
# THE CASE OF THE INTERCONTINENTAL MARSEILLE

# A progressive deployment, the one of water fountains

Substituting plastic water bottles with re-employable glass water bottles requires extra work by staff (filling bottles at the water fountain, collecting empty bottles in the areas involved and washing them etc.). The hotel InterContinental Marseille -Hotel Dieu has opted for gradual rollout, starting with hosting events of fewer than 50 people, then the SPA area and the suites, before extending the alternative to the entire hotel.

# "Moving from single-use water bottles to a subscription model with a water fountain system certainly involves some major changes, as well as responding to a major problem. The alternative is perceived well by staff"

Aboubakr Henou, head of operations at the InterContinental Marseille - Hotel Dieu





# SETTING UP THE PROJECT

# **Time:** X X X Ongoing for the whole project

**To be mobilised:** Project point of contact, procurement manager for stock monitoring, people at reception and on room service for monitoring customer feedback, departmental heads for monitoring collection of various data.

# GAUGING THE IMPACT **OF THE TEST**

Gauging the impact of the project means analysing the effectiveness of the test, and being able to actually draw benefits from its endeavours and successes, and to know precisely about its methods of improvement. We suggest a classic and robust 3-stage method: i/specify your indicators against your objectives, ii/collect the data required and iii/interpret the results. You can easily specify your indicators at the same time as your objectives (see 1.1 Clarify objectives) to save time!

# 6.1 Specify key indicators

Refer to your initial objectives again and turn them into big questions, such as:

- Did the pilot project enable a reduction in Single-Use Plastic (SUP) use without leading to transfer of environmental impacts?
- What are the costs and benefits of the process? At what point in time are the alternatives amortised?
  - Did customers and staff stick to the process and accept the changes?

These important questions will enable key indicators to be defined (Key Performance Indicators, KPIs), and make it possible to choose which data to collect depending on this, and to be able to set up the data collection process.

Caution! You need to choose a year and a reference period: all these questions pertain to a starting point. You will see that this will become very clear in the next section!



Table model of evaluative questions, indicators, data

# THE CASE OF THE INTERCONTINENTAL MARSEILLE

# The pilot's KPIs

# Concerning environmental matters:

<u>average mass of SUPs</u> avoided over test period <u>percentage reduction</u> in consumption of SUPs over test period <u>average environmental impact</u>

# **Concerning economics:**

<u>spending</u> on test implementation <u>savings</u> achieved for test period <u>return</u> on investment

Concerning social acceptability: perception by staff perception by customers

# 6.2 Identify and collect the data required

You have defined your KPIs, so you now need to analyse them to identify i/how you will calculate them, ii/data that you require, and iii/the data collection method.

Calculation methods are specific to the chosen indicators (see details of the case of the InterContinental Marseille - Hotel Dieu in **standard model #3**). However, there is a common point for all indicators: the need to specify a reference period (situation before rollout of alternatives) and a test period (during rollout of alternatives). Data gathered for the test period will be compared with those from the reference period to see how the situation has developed.



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# A POINT TO LOOK OUT FOR

While altogether laudable to want to carry out this process as precisely as possible, we have decided on a "coarse mesh" analysis taking into account the constraints of time and budget. This continues to be robust from a global methodological viewpoint. We know and recognise the approximations we have put into effect and the hypotheses we have put forward. You are free to add finer points, completeness and specific cases!

Choose the reference period and test period:

What are the dates of your test period? Though your alternatives can be set up gradually, we recommend simplifying and conducting your analyses over the same period for everything.

What is your reference period? The simplest thing is to take the similar period for the previous year if the situation has not turned it into an atypical year²⁷.

In terms of data for collection, although this is dependent on your KPIs, here is a list of the must-haves:



- Visitor numbers to the hotel for the test period and reference period: this will enable you to calculate the consumption rate of an SUP or of an alternative, the feedback rate of customers etc. ;
  - the quantity of SUPs and alternatives ordered for the test period and the reference period: this will be useful for calculating the mass of plastic avoided, the consumption rate etc. ;
  - **the unit cost of SUPs and alternatives**: this will be vital for estimating savings or overcosts caused by the changes;
  - **customer and staff feedback**: it is vital to collect their experiences and to go beyond what the project team perceives.

Some data may be collected before, during and after the test phase. For example, the mass of the SUPs can be weighed or known (via technical sheets) from **step 2**. In all cases, we recommend listing them and centralising them in a standard model #3 (see **table**), to facilitate collection and analysis.

Allow time to check, KPI by KPI, the calculation method and the data required. By doing so, you will be able to picture the way of collecting data: does my purchase and stock management software enable me to have this information? Will my complaints system suffice for knowing about any malfunctions? Do I have access to webometrics data²⁸ for finding out about the number of clicks on my website?

# OUR TIPS

Always come away with thoughts about the question and about the initial objective: it is so easy to become lost in data and indicators! Methodological rigour and precise information are valuable, but stay on course for the KPIs; this alone makes for a great deal of work!



²⁷ In our case, we had to go back 3 years due to the COVID crisis: it was not opportune to take 2020 and 2021 as reference years
 ²⁸ Data from evidence left by customers on socio-digital devices available: website visits, number of clicks of QR code, reviews left on booking websites etc.

# THE CASE OF THE INTERCONTINENTAL MARSEILLE

The environmental KPIs, from the key question to the calculation methods and necessary data

	Key question	Key indicators - KPIs	Calculation method	Data required	Data source
ei in Pl le	Did the pilot project enable a reduction in Single-Use Plastic use without leading to transfer	The mass of SUPs avoided, on average, over the duration of the test	<ul> <li>Calculation of projection of consumption of mass of SUPs in terms of <i>business as usual</i> (BAU) if the test had not taken place</li> <li>Calculation of actual consumption of mass of SUPs over the test period</li> <li>Calculation of difference: [SUP mass consumed in terms of BAU] - [actual SUP mass consumed] = mass of SUPs avoided</li> </ul>	<ul> <li>Mass of SUPs per unit (in g)</li> <li>Number of SUPs consumed for the reference period and the test period</li> <li>Number of overnights for the reference period and for the test period</li> </ul>	<ul> <li>Weighed pr</li> <li>Supplier teo product and</li> <li>Hotel's inter software</li> </ul>
		Rate of cut in consumption of SUPs, on average, for duration of test	Ratio of [mass of SUPs avoided] / [mass of SUPs consumed in terms of BAU] * 100		
	of environmental impacts?	The average environmental impact of alternatives compared with initial SUPs: choice of 3 indicators from the simplified lifecycle assessment (see 4.1) ²⁹ : effects on climate change, use of water resources, eutrophication of the marine environment	Use of indicators from the European PEF reference (Product Environmental Footprint) Researchers from the ENSAM worked alongside this methodological development.	<ul> <li>Climate change: equivalent of kg of CO2</li> <li>Use of water resources: Water deprivation in mass³</li> <li>Potential eutrophication of marine environment: equivalent kg of nitrogen</li> </ul>	<ul> <li>Weight of S</li> <li>Technical sp</li> <li>Database: E</li> </ul>



# ce

# products

- echnical specifications (composition of
- nd mass of different materials)
- ernal purchases and stock management

SUPs and their alternatives Ecoinvent V3.7.1

# **(A)** THE CASE OF THE INTERCONTINENTAL MARSEILLE

## The monitoring-evaluation of social acceptability

To know whether the changes were accepted socially, we have looked at two targets: the staff and customers of the hotel.

# Monitor and assess the acceptability of changes by staff:

Start by involving your colleagues as early as possible and base things on their practices and needs as proposed above (see 5.1 (inform and train staff). Then, to formally collect their feedback at the end of the test, you can use the following indicators, developed by InOff Plastic and used at the InterContinental Marseille - Hotel Dieu:

# Overall perception of alternatives

<u>Degree of change</u> engendered by establishing the alternative (department heads) <u>Degree of change</u> engendered by day-to-day management of alternatives (staff) <u>Degree of practicality/difficulty</u> engendered by the alternatives <u>Time elapsed</u> in establishing alternatives, time taken to set up alternatives vs. time taken for staff to set up alternatives before setup was complete

They were assessed using a questionnaire with a grading scale (eg. 0 = no change, 10 = major changes) and quality-based feedback collected at the monthly team meetings.

# Monitor and assess the acceptability of changes to customers:

Gauging customer satisfaction was done by researchers from the IMSIC using existing tools and others developed for this purpose:

<u>questionnaires</u>: the hotel's general satisfaction questionnaire, and a specific questionnaire accessible by the QR from the communication signage

from a webometric analysis: opinions left on booking websites and from the number of customers using a QR code from signage created for the project

Conducting interviews would have been ideal, but this system was too cumbersome and time-consuming to set up.

# 6.3 Interpreting results

So now is the time, armed with your experience and your KPIs with regard to environmental, economic and social aspects, that you'll be able to build an opinion with regard to the effectiveness of the test. Analysis of results enables a conclusion to be drawn with regard to alternatives to retain conclusively, to roll out more widely in different areas of the hotel, to adapt (from the point of view of protocols, communication messages) or to redesign more drastically due to the environmental impact.

In the case of the InterContinental - Marseille Hotel Dieu, it made it possible to get rid of concerns about certain re-employable alternatives that initially appeared difficult to set up for reasons of hygiene (eg. using and washing sugar bowls), acceptance by customers (eg. cancelling room amenities and making them on request) or time spent by staff (eg. re-filling water bottles). Other results, meanwhile, went against hopes (eg. sweets made available loosely to replace separate bags).

# $\bigcirc$ CLOSEUP ON

# Interpreting the lack of feedback from customers

Of the 15,000 customers received during the test period, only 307 completed the satisfaction questionnaire and only 4 of these gave a negative opinion (all with regard to a lack of bathroom kit). Information and communication science researchers concluded from this that the micro changes brought about by the reduction in SUPs in the hotel went unnoticed among customers.

"It's not a bad thing that the hotel succeeded in changing behaviour with regard to plastic use in a way that was "invisible" for its customers. We know about peoples' reticence towards change which is readily expressed. Having succeeded in changing things without leaving oneself open to criticism is therefore in itself a positive aspect." Éric Boutin and Daphné Duvernay (IMISIC)

# **OUR TIPS**

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View your operation as a process of ongoing improvement and as a repeated process! You already know what your quick wins are, as well as your disappointments and your levers for improvement, and you should be commended for that! Regularly assessing your KPIs will enable you to adjust your output decisions for SUPs. And generally speaking there are two pathways for taking things further: i/returning to the diagnosis stage and dealing with SUPs that you deemed non-priority and ii/improving management of your waste in different spaces (separation, collection, recycling).

# **ENHANCING THE VALUE OF YOUR EXPERIENCE TO REINFORCE THE IMPACT**

# YOU'VE GOT AS FAR AS THIS, WHICH IS A GOOD REASON NOT TO LEAVE IT AT THAT!

Share your experience! Tell others about your successes and tips; this is so valuable and necessary in the current context in which everyone needs to act to reduce our impact on the planet. You can join certification bodies or sustainable development clubs, communicate widely (press conferences, external communication media, urban poster campaigns etc), or discuss things with local authorities (tourism and environment). This will also highlight your commitment.

So we are counting on you to:

- become an ambassador within your group and with your colleagues;
- build the standards with a more pronounced environmental dimension;
- and share your experiences with us so as to improve this practical guide to benefit as many people as possible: **contact@beyondplasticmed.org**



# Standard models available



To establish your initial diagnosis Standard model #1: diagnosis table of single-use plastics.



To request exemptions from hotel standards Standard model #2: request an exemption to standards.



To achieve the benchmark of alternatives Standard model #3: Table of benchmarks of alternatives and suppliers.



To develop your system of monitoring and assessment Standard model #4: Table of evaluative questions, indicators and data.

# Banning single-use plastics: they've done it!

The removal of single-use plastics represents a new development strategy for the activities of the hotel and industry. Actions undertaken towards this goal do not contradict a strong brand image and unchanged quality services, as shown by the following:

IBEROSTAR* HOTELS & RESORTS

INTERCONTINENTAL.

MARSEILLE - HOTEL DIEU

OPÉRA LIÈGE

PARIS

The Iberostar group has more than 100 4 and 5 star hotels in 16 different countries. In 2020, within the context of its strategy of circular economy, it committed to a transition towards hotels without single-use plastics, thereby becoming one of the world's top players in the eco tourism market.

In 2020, the Best Western Premier Opéra Liège, a 4 star hotel in Paris, became the first hotel in France to ban single-use plastics from its services. This was a pilot project coordinated by Racing for the Oceans.

The InterContinental Marseille - Hotel Dieu has worked for the past few months towards removal of its single-use plastics. It is a 5 star hotel that is continuing its actions with regard to sustainable development as part of a process of ongoing improvement.

For further examples of hotels that have committed to a process for the removal of single-use plastics, and to see what other actions against plastic pollution are achievable, the Free Plastic Balearics website lists the hotels, restaurants, bars and cafés of these islands that are certified to be SUP-free and which are using waste reduction processes.

# **SOURCES AND** RESOURCES



# Useful resources for taking things further

Many other bodies have published guides concerning SUPs, applied to various sectors of activity. They are packed with ideas, resources and information for taking things further and participating in the promotion of responsible tourism.

Here is a (non-comprehensive) list of them:

# Hold the plastic, please / drawn up by the Beyond Plastics association

The guide shows the stages and examples of alternatives with a view to removal of SUPs from restaurants. The hotel and industry may find ideas here for its services.

# Dry Cleaners / drawn up by the Beyond Plastics association

Applied to services proposed by dry cleaning outlets, this guide is in line with the previous one: in it are stages and examples of alternatives with a view to removal of SUPs. The hotel and industry may find in it resources and ideas for its back office services.

# Sortir des PUU en 2024 / (removal of SUPs by 2024) drawn up by the City of Paris

With a view to the 2024 Olympics, the City of Paris has drawn up a guide intended for the tourism sector (restaurateurs, hotel keepers, managers of cultural locations etc.) and more generally any business liable to host large numbers of tourists. This guide presents a set of ideas, tools and actions to take with a view to making Paris a zero SUP city. The tools are available to everyone and help to understand the nature of your plastic use: its origins, the risks and opportunities associated with it, the financial impact and the benefits of the project etc.

# Stop the flood of plastic / drawn up by WWF

This guide provides effective methods of avoiding use of SUPs and more generally of packaging in the tourism sector. It specifically provides a certain number of European examples in geographical areas that are very popular with tourists. It concludes with recommendations for people and organisations within the tourism industry (travellers, travel agencies and hotels/restaurants).

# A Guide to honest alternatives to Single-Use Plastics for the hospitality industry / drawn up by Plastic Free Balearics

This graphical guide is designed to provide information in a summarised, attractive, clear and above all practical manner for companies in the hotel and restaurant sector about alternatives to singleuse plastic. It provides detailed information about alternatives with the least environmental impact, general principles for reducing consumption of plastic, tips for establishing good practice and assistance with regard to identifying false alternatives. The guide is based on advanced research into current alternatives to single-use plastics on the market, and a comparison of their environmental impact through an indexing tool.

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# 5 Rs

The 5 Rs rule: "Refuse, reduce, reuse, recycle, rot", is from the book "Zero waste home" by Béa Johnson, and it makes it possible to structure a process for reducing waste, including plastics.

# Acidification (ADEME definition, for life cycle assessments)

This phenomenon results from emissions into the atmosphere of nitrogen oxide, sulphur oxide and ammonia & hydrochloric acid. These components become acids in the presence of humidity, and the resulting acids - in the form of rain, for example - can damage ecosystems. The main manmade sources of acidification are activities involving combustion, including transport. Ammonia, meanwhile, derives mainly from agriculture.

# Climate change (ADEME definition for life cycle assessments)

There is scientific consensus with regard to recognition of a direct link between growth of greenhouse gas emissions resulting from human activities and recent climate changes undergone by Earth. So this translates into an increase in exceptional climate events (eq. : flooding, storms, heat waves, drought), with these changes affecting the global ecosystem of our planet. A wide range of human activities emit greenhouse gases: Industrial activities, transport, buildings, agriculture and livestock farming, waste management, deforestation and some soil management practices etc.

# Water consumption (ADEME definition for life cycle assessments)

Different resources (eq.: rivers, lakes, underground reservoirs) can be mobilised to meet water needs for human activities. These removals amount to excluding water from natural environments while water availability (and therefore its rarity) may vary depending on the region of the world or to the times of year. Depending on the instance, they may therefore contribute towards the phenomenon of water deficit.

# Webometric data

Data from evidence left by customers on socio-digital devices available : website visits, number of clicks of QR code, reviews left on booking websites etc.

## Primary, secondary and tertiary packaging (ADEME definitions)

Primary packaging means packaging in direct contact with the product. The purpose of the packaging is to contain, preserve and protect the finished product. It's the first layer that wraps the finished product. It is designed in such a way as to facilitate product handling by consumers. It also serves to make the product more attractive and enables information about the product to be communicated to consumers. The grouping packaging [or secondary packaging] facilitates the handling of more than one product by grouping them into a single packet. It can be separate from the goods it contains or protects, without modifying its preservational properties. Transport packages [or tertiary packaging], enables large quantities of products to be transported from point A (eq. : factory) to point B (eq. : sales outlet). They therefore facilitate handling, storage and transport of goods, as well as avoiding damage.

# Eutrophication of water (ADEME definition for life cycle assessments)

Eutrophication of water is caused by excess nutrients leading to proliferation of algae and eventually to suffocation of the environment. Eutrophication of freshwater is mainly caused by components containing phosphates, that of saltwater to components containing nitrogen. Generally speaking, farming activities and industrial & domestic activities contribute to these outflows of nutrients into the environment.

# Land-based eutrophication (ADEME definition for life cycle assessments) Land-based eutrophication means excessive enrichment of the environment, especially with nitrogen, leading to an imbalance and impoverishment of the ecosystem.

# Formation of photochemical ozone (ADEME definition for life cycle assessments)

Photochemical ozone is formed in the lower atmosphere from, among other things, volatile organic components and nitrogen oxides, due to the effects of solar radiation. Ozone is a very powerful oxidant, known for having effects on health, as it is able easily to penetrate the respiratory pathways.

## Nudge

The "Nudge approach" was theorised by Thaler and Sunstein in 2008 and involves changing people's behaviour in a foreseeable way without prohibiting any option. It involves using levers for so-called gentle prompting so as to encourage people to take the best decision for themselves and for society.

# Fine particles (ADEME definition for life cycle assessments)

This phenomenon involves primary fine particles, produced directly be certain human activities (eq. : combustion activities, soil tillage), as well as secondary fine particles formed using precursors (eg. : nitrogen oxides, sulphur oxides, ammonia). The smaller the particles (nanoparticles, microparticles of a few microns), the more able they are to penetrate the lungs deeply and thus have repercussions that are harmful to our health.

## **Polymer (technical definition)**

Polymers are synthetic macromolecules obtained by polymerisation or polycondensation of small molecules called monomers. The reaction of polymerisation gives rise to carbon chains whose structure (linear, branched and cross-linked), length (n number of carbon atoms brought together from the simplified chemical formula CH3-(CH2)n-CH3) and assembly form topologies that determine their physical and chemical properties.

# SUPs (Single-Use Plastic)

Plastic used just once before being discarded, which is not intended to be reused. This can, for example, include packaging, containers (drinking cups), utensils (plastic covers etc.)

# Ionising radiation (ADEME definition for life cycle assessments)

lonising radiation is a form of energy freed by atoms, with this energy being able to disrupt or destroy cellular functions of living beings or change the genetic code of cells.

## Recycling

Process for treating products that have reached the end of life (waste), that enable reintroduction of some of their materials into the production of new goods. For further information about the different possible definitions and issues associated, please see the technical specifications produced within the context of the BeMed Business Club.

## Recycled

Describes a material derived from recycling other products.

## Recyclable

Property of certain materials that can then be used for recycling.



# **Re-employment**

Concerns any operation through which a product that is not waste is used again, for a use that's identical to the one for which it was designed. For further information, please refer to the **technical specifications produced within the context of the BeMed Business Club**.



## Reuse

Concerns any operation by which a product that has become waste is used again, after one or more operations involving cleaning, checking or repair.

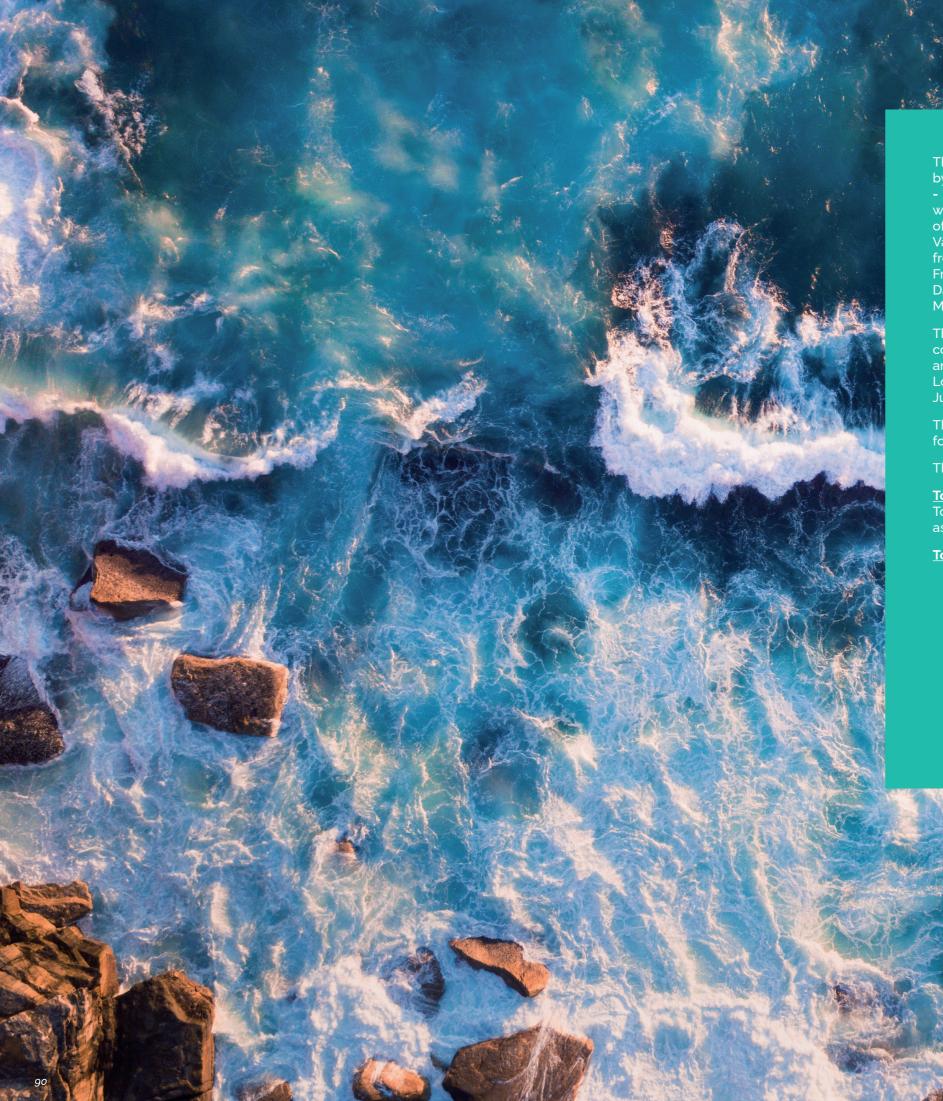
# **Transfer of impact**

Transfers of impact occur if an improvement with regard to an environmental factor at a stage of the lifecycle involves negative effects on another stage of the lifecycle or on another environmental factor.

# Use of fossil resources (ADEME definition for life cycle assessments)

Our planet contains a limited quantity of minerals enabling the production of metals (eg. : copper, bauxite, lead), of mineral resources (eg. : sand, potassium) and fossil energy resources (eg. : carbon, natural gas, oil, uranium). These resources are more or less rare due to existing reserves and rates of extraction. Their extraction leads to lower availability for future generations.

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# The BeMed association

On the initiative of the Fondation Prince Albert II de Monaco, of the Fondation Tara Océan, of the Surfrider Foundation Europe, of the Fondation Mava and of the UICN. Beyond Plastic Med (BeMed) was set up in 2015 to fight plastic pollution in the Mediterranean. Through the mobilisation and support of committed participants, implementation of effective and lasting solutions and sharing experience and good practice, BeMed is taking action to stop plastic getting into the sea. To tackle local problems as effectively as possible, BeMed has already supported 81 projects in 15 countries via its annual calls for projects. To strengthen its impact, in January 2020 BeMed created a Business Club bringing together companies wanting to commit themselves to a plastic-free Mediterranean. The purposes of the Business Club are to bring companies from different sectors and from different links in the value chain of plastic together, to develop dialogue between scientists and industrialists and to roll out actual actions appropriate to the various local contexts of the Mediterranean.

The BeMed association is hosted by the Fondation Prince Albert II de Monaco.

# Founder members of BeMed who are active



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