

# Plastic-free zones

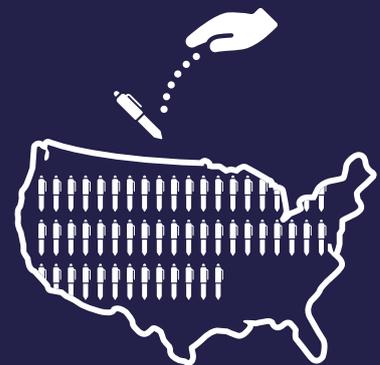
## Save the sea from your office



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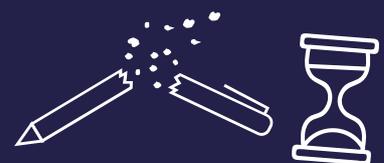
### » 01. Danger: **Plastic**

- Plastic contributes to global warming since it is produced from fossil fuels. For every kilogram of plastic that is manufactured, about 3.5 kg of CO<sub>2</sub> is released into the atmosphere.
- The system of managing and/or recycling plastic is inefficient – a proportion of the plastic remains outside the system and is transported to the sea from areas far from the coast by rivers, streams or atmospheric agents such as the wind.
- Every year, more than 100 million tonnes of plastic end up in the natural environment, representing up to 95% of the waste that accumulates on the coasts, the surface and the bottom of the sea.
- The production of plastic accounts for 3.8% of global CO<sub>2</sub> emissions. By 2050, plastic will be responsible for 10-13% of the carbon budget we must maintain in order not to increase the average temperature of the planet by 1.5°C (agreed at the Paris Summit). (CIEL, 2019)



The UNITED STATES  
throws away  
**1,600 million  
pens a day.**

(New York Times, 1988)



A PLASTIC PEN takes  
**500-1000 years**  
to be broken down.

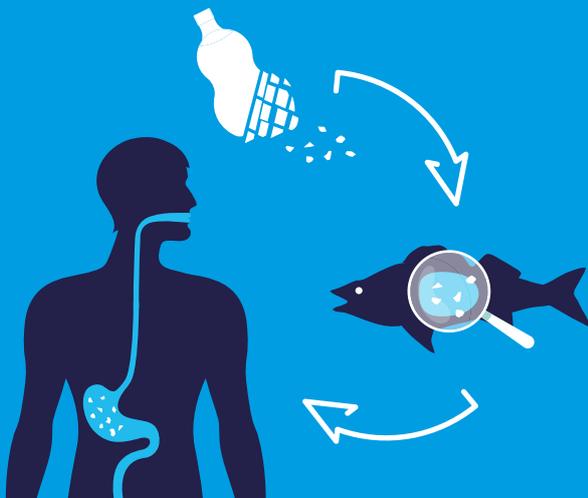
## » 02. When plastic reaches the sea

Single-use plastics are a significant part of the problem as they have a very short lifespan and do not fully degrade in the environment. All this plastic has a detrimental effect on fauna and flora, especially affecting marine ecosystems:



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It is common to see animals, such as cetaceans and turtles, that have ingested or have been trapped in plastic objects: bags, rings, straws and others, causing them physical harm and even leading to their death.



Due to the action of water, the sun, and bacteria, plastic breaks down into smaller particles – microplastics – which form a *plastic soup* that can also be ingested by marine animals. This plastic becomes part of the food chain and, through commercial species of fish and shellfish, is consumed by people.

In the case of the great sea depths, due to their environmental conditions, degradation is very slow or non-existent, and waste accumulates over the course of hundreds of years in the form of huge rubbish dumps.



**A REDUCTION** in the consumption and production of single-use plastics is the only solution to decrease marine pollution.

## » 03. Beyond the office



Most of the rubbish that ends up in the sea is generated on land. The rivers and streams, as well as the sewage system, are responsible for transporting the waste that escapes the collection systems of cities and towns to the sea. These systems are sometimes inefficient for management collection, separation and recycling of waste. In addition, tens of thousands of tonnes of plastics are exported from Europe to other countries –mostly in Asia– that lack the necessary infrastructure to carry out a proper management of this waste, and where it ends up being incinerated or dumped in the environment. Finally, littering is common both, on the beach or from recreational and professional boats. The data indicates that, overall, only 9% of all plastic that has been generated throughout history (since the 1950s) has been recycled (Geyer et al., 2017).

Oceana has documented the impact of plastics in European waters on its multiple at sea expeditions for the over 15 years. In some cases, marine litter was even found in previously unexplored depths of up to 1000 metres, confirming that plastics have already reached further than human beings and that we are facing an environmental emergency. It is therefore essential to minimise the amount of plastic that we use in our daily lives and transform everyday places, like the office, into 'Plastic-Free Zones'.



There is marine litter in  
previously unexplored  
seabeds at thousands  
of metres deep.

## » 04. How to reduce plastic in your workplace

Oceana suggests following these steps:

- 1** Carry out an audit in the different areas of the office (e.g. offices, common spaces, kitchen, toilets) in order to get a general overview and establish how much plastic is consumed. This will also help you to set the reduction targets and keep in mind the part of the budget allocated to plastic consumption. Set a date to meet these targets.
- 2** Study which plastic products can be eliminated, prioritising those with a shorter lifespan and those used in big quantities.
- 3** Replace the plastic objects that are essential with sustainable alternatives available on the market.



### HOT SPOTS IN THE OFFICE



Coffee Machines



Water dispensers



Vending machines



Larder (kitchen)



Cabinet for office materials



Bathrooms and toilets

## » 05. Audit: classification, quantity and budget

Offices have very different characteristics, starting with variables such as the number of employees and the facilities they have (e.g. kitchen, vending machines).

The most practical way to begin is to establish what you acquired in the previous year(s) by consulting administrative documents (e.g. purchase receipts and invoices), since these can give a reliable idea of the trend in terms of plastic consumption. In this exercise, you should take account of all plastic objects, ideally distinguishing between those that are single-use, those that have a medium useful life (months) and those that have a long lifetime, such as electronic devices.

It is also important to take into account the financial considerations, to determine the budget allocated to these products that you are going to eliminate/replace. This will allow you to establish a possible percentage increase in this budget that can be assumed by your company/organisation for the acquisition of alternative products.

Although this increase may be unavoidable initially, actions to reduce plastics such as buying in bulk or wholesale, as well as reuse policies and the elimination of non-essential products amount to savings in the medium/long term.

# » 06. Analysis by areas

Taking into account the most common objects used in offices, the table below shows possible alternatives to plastic.

## PRODUCT/SUBSTITUTE

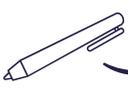
### Common areas

 Plastic bottle	 Refrigerated dispenser (without plastic cup dispenser) or tap, reusable bottle	 Coffee machine	 Coffee maker without single-dose capsules
 Snack vending machines	 Snacks without plastic wrapping, provide snacks in bowls (e.g. nuts)	 Plastic key card	 Key or app
 Visitors badges laminated in plastic	 Cards made of cardboard	 Plastic bags	 Eliminate, cloth or paper bags

### Kitchen

 Disposable food containers	 Reusable lunch boxes (glass, bamboo)	 Cleaning products	 Search for provider that supplies in bulk
 Plastic cutlery	 Metal cutlery	 Plastic glass/plate	 Ceramic crockery
 Food in single doses or packaged in plastic (e.g. coffee, tea, sugar, salt, oil, honey, milk)	 Bulk, reusable capsules, unwrapped single-dose products (e.g. tea, carafes holding several litres, jars or glass bottles)	 Coffee stirrers	 Eliminate

### Work spaces / offices

 Plastic pens	 Refillable pens or pens made of sustainable materials (paper, wood, bamboo)	 Rubbish bags in waste bins	 Eliminate bags and individual bins by establishing common recycling points	 Stationery (post-its, stickers, lots of various items)	 Find a supplier that provides these without plastic wrapping
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### Toilet

 Single-dose personal hygiene products	 Eliminate (e.g. wet wipes), plastic-free options (e.g. toothpaste bars, plastic-free feminine hygiene products)	 Bottle of liquid soap	 Dispenser (no microplastics), bar of soap	 Waste bin	 Paper bags/ eliminate bag
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Analysing our **PLASTICS RECYCLING CONTAINER** regularly gives us an idea of the plastics that we are generating and if we are making progress in our objectives.

## » 07. Case Study:

# An office of 30 people

Our case study consists of an office designed for no more than 30 people, which has common areas and meeting rooms, offices, a kitchen and toilets. Let's say that improvements have already been made, such as having a kitchen with ceramic crockery, metal cutlery and a coffee maker without capsules or plastic cups. Even so, to be more efficient in reducing plastic, the analysis is carried out and for the process of opting for more sustainable articles the threshold for the possible increase in the budget is set at 140%.

After conducting the audit, we would start by eliminating or replacing the 10 objects that are most used, reviewing the administrative documentation for the previous two years and identifying the use of plastic, either as part of the object itself or in its packaging. In this case, these products mainly involve food and stationery. These would be the preliminary results after the accounting review:

OBJECTS	NO. ITEMS	Aprox. PRICE per item	REPLACEMENT	Aprox. PRICE per item	DIFFERENCE (%)
<b>Kitchen</b>					
• Milk (carton)	1221	€0,79	Glass bottle	€1,15	45,57%
• Oatmeal drink (carton)	12	€1,40	No replacement	-	-
• Coffee (packet)	566	€2,85	Bulk	€5,65	98,25%
• Biscuits (packet)	150	€2,00	Eliminated	-	-100%
• Sweets (bag)	30	€1,30	Eliminated	-	-100%
• Orange juice (carton)	52	€1,65	Glass bottle	€2,35	42%
<b>Work positions /offices</b>					
• Post-its (packet)	14	€7,73	Without plastic wrapping	€1,02	-86,80%
• Adhesive tape	59	€3,00	Eco-friendly tape	€0,32	-89,21%
<b>General</b>					
• Air freshener	15	€0,95	Eliminated	-	-100%
• Packing tape	17	€1,45	Paper packing tape	€3,25	124,48%

## » 08. Changes to become 'plastic-free'

The changes to become a plastic-free office do not necessarily entail an increase in the budget, since some items that were consumed previously are eliminated, with the consequent financial savings. Similarly, these changes are also applicable to suppliers that provide products without plastic packaging, or that allow you to reuse or return the containers.



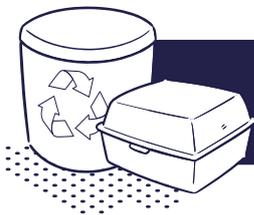
In addition to taking action to eliminate plastic from the office, it is equally important to be able to change the habits of users/employees. There must be general collaboration through the development of a 'plastic-free' culture and raising of awareness about sustainability through guidelines and tools promoted by the company/organisation.

Handing over a pack of reusable products (e.g. refillable bottle, coffee mug, bamboo/glass bowl or even a bamboo toothbrush) to employees can be a great way to encourage them to incorporate these items into their day-to-day life.



## » 09. Other recommendations from Oceana

- In 2021, the [DIRECTIVE \(EU\) 2019/904](#) comes into force across the European Union. This requires that a series of single-use plastic items, such as straws, cutlery and coffee stirrers, are no longer used. Oceana encourages offices to act in anticipation of these measures as soon as possible and in a more ambitious way than is contemplated in the directive.
- Reduce rather than recycle—recycling is not always carried out in an energy efficient way and it also involves a waste of resources. In addition, a large percentage of containers are discarded because they are made from a mixture of different types of plastic that makes recycling infeasible, due to their size or other conditions.
- Biodegradable and compostable plastics are not the solution, as their complete degradation in the marine environment is not guaranteed ([Shen et al. 2020](#)). Additionally, often these products are only partly made of renewable materials and partly made of petroleum derivatives. Compostable products (e.g. those produced with starch obtained from corn, wheat or potatoes) are not the alternative either: in general, the term refers to industrial composting – in which plastic is subjected to conditions that are not found in the natural environment (e.g. high temperatures) – so they constitute a threat to biodiversity similar to other plastics.
- Sometimes it is not possible to eliminate all the plastic from your office, but other factors that help increase the sustainability of what we consume can be taken into account, such as local shopping, circular economy or products made with recycled material.



**Biodegradable products are not the alternative**  
as they are a threat to biodiversity similar to other plastics

## » 10. For more information

### Reports

- [Plastic in the deep: An invisible problem](#) (Oceana, 2020).
- [Plastic & Climate: The Hidden Costs of a Plastic Planet](#) (CIEL, 2019).
- [Breaking the Plastic Wave: A comprehensive assessment of pathways towards stopping ocean plastic pollution](#) (Pew, 2020).

### Websites

- [Plastics: A problem in the depths of the oceans.](#) (Oceana, 2020).
- [#WeChooseReuse.](#)
- [10 rules for a plastic-free office](#)
- [How to make your workspace a plastic-free zone.](#)
- [UN Environment: Beat plastic pollution](#)



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