

To fight plastic pollution,

**BEWARE OF PLASTIC  
FAKE OUTS.**

**More than 400 million  
tons of plastic are  
produced worldwide  
every year.**

**More than 1/3  
of all plastics  
produced are  
single-use  
packaging.**

In addition to the impact generated by plastics throughout their life cycle, the problem is that we still don't know how to deal with the millions of tons of plastic waste produced.

**1/3 OF PLASTIC WASTE  
ENDS UP IN THE ENVIRONMENT EVERY YEAR  
AND POLLUTES LAND, RIVERS AND OCEANS  
FOR CENTURIES.**

Faced with the extent of the damage caused by plastic pollution, some “environmentally friendly” solutions and other alternatives are emerging. But when we take a closer look, their impact sometimes seems limited or even counter-productive: these are plastic fake outs.

We'll highlight 3 of them, as well as some true solutions to tackle plastic pollution!

# 02 FALLING INTO THE TRAP OF BIOPLASTICS.

Presented as a formidable alternative to so-called conventional plastic, bioplastic production has experienced a real boom and many companies are turning to bioplastics to demonstrate their environmental commitment. For our part, we can think we're doing the right thing by opting for products or packaging branded as being bioplastics. Don't be fooled, these plastics only have bio as a prefix.

The word « **bioplastic** » deserves a small clarification since it refers to 2 different types of plastics:



### BIO-BASED PLASTICS

They are partly made up of organic materials (cane sugar, corn starch or potato starch) which do not come from organic farming. They may also contain fossil fuels.



### BIODEGRADABLE PLASTICS

They can decompose under the effect of micro-organisms. This is only the case under very specific conditions that are not found in nature, let alone in the ocean.

Careful, it gets more complicated: it is possible for a bio-based plastic to be biodegradable and vice versa, but in more than 60% of the time this isn't true..

A bio-based plastic IS GENERALLY NOT BIODEGRADABLE

A biodegradable plastic IS GENERALLY NOT BIO-BASED

What is certain is that bioplastic is not a miracle solution!

Not only is its name misleading, but it is also very problematic. To understand it, let's take a closer look at the bioplastics.

### BIO-BASED

Bio-based plastics are just as problematic as "conventional" plastics:



Most bio-based plastics still contain oil:

Today, the term "bio-based" is used to describe plastics that can contain up to

**75% OF OIL**

since the minimum recommended biomass in a so-called bio-sourced plastic is 25%.

The biomass used originates from an intensive and polluting industrial agriculture:

Among the main agricultural raw materials used to make bio-based plastics are:

### Cane sugar

It comes primarily from Brazil, where part of the Amazonian primary forest is cut down to produce it in single-crop farming. It requires huge quantities of pesticides with harmful consequences on the environment and local communities. In addition, the handful of companies that dominate the Brazilian sugar market maintain the exploitation of their employees in a precarious situation.

### Corn and potatoes

Both are products of highly industrialized farming that is particularly water - and chemical - intensive. GMOs are also tolerated in the manufacture of these plastics.

The production of raw materials for bio-based plastics raises the same issues as the production of bio-fuel:

A monopolization of cultivated land that competes with human food agriculture.

Increased pressure on the land leading to water shortage, species extinction, land desertification and loss of natural habitats.

Their manufacture is just as polluting:

To transform these raw materials into plastics, the same process as for 'conventional' plastics must be followed. The manufacturing process takes place in factories which release a lot of greenhouse gases.



The question of their end of life is unresolved:

No matter how much bioplastic, this plastic becomes waste like any other at the end of its use. Recycling channels refuse it because of its nature, as it affects the process and quality of recycling. It therefore ends up being incinerated, dumped in landfills or in the environment, contributing largely to pollution.



### BIODEGRADABLE

Biodegradable plastics aren't really biodegradable

A plastic material that would decompose on its own when thrown away, wouldn't that be wonderful? This is what the marketing initiatives of some manufacturers might lead us to believe, to save our conscience when we buy their single-use products.

Disposable cutlery, straws, wipes, coffee capsules, plastic bags, no need to worry about them anymore, they would disappear as if by magic. In many cases, biodegradable plastics are a hoax and even a real danger for the environment.

Plastic, as chemical as it gets biodegradable...

The so-called biodegradable plastic can be made of organic matter and/or petrole and is in all cases accompanied by additives. This plastic is said to be biodegradable because the organic elements decompose under the action of micro-organisms (bacteria, fungi, algae...) and break down into simple elements such as carbon, hydrogen or oxygen. However, the time required for total degradation is questionable and we do not know to date what happens to the additives.

## ...under conditions that are not found in your home or in the environment.

Although there are standards for home composting in some countries that state that plastic waste can be composted at home, the length of time it takes to decompose compared to food waste and the impact of additives on the compost are problematic. In fact, most of the plastics known as biodegradable are not biodegradable under conditions which one finds in the environment but in industrial composting facilities: temperature of more than 50° + a strong rate of moisture + the presence of the adequate micro-organisms.

British researchers have observed the decomposition of biodegradable plastic bags in the natural environment.

### CONCLUSION

3 years later, biodegradable bags buried in soil and water were still in very good condition.



## This is a real threat to the environment

In the ocean, living species have plenty of time to ingest these plastics before they degrade. And during the decomposition process, they break down into microparticles that pose an even greater danger to ocean life.

## A nuisance for the recycling industry

Not only does the decomposition of these plastics raise questions, but they cannot be recycled in conventional sorting systems. Very few communities are equipped with industrial composters and the collection of bio-waste is not generalized everywhere in Europe. We thus pay more for a product which in reality is neither collected separately, nor treated adequately.

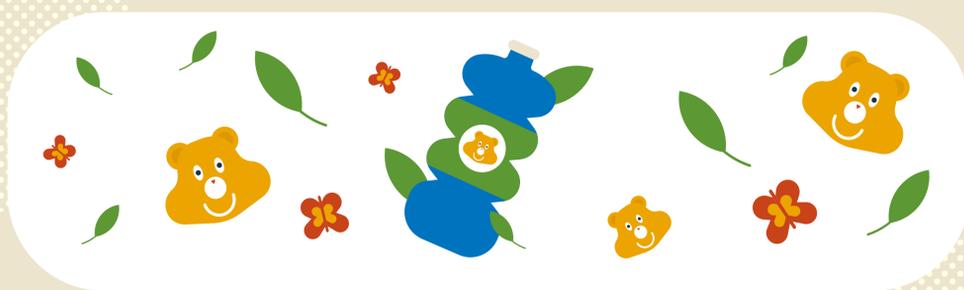
### THE TRUE SOLUTION

## DON'T BE FOOLED BY MARKETING

The ambiguous naming and labelling of some bioplastics products send a misleading message to consumers who think they are taking a green and environmentally friendly approach.

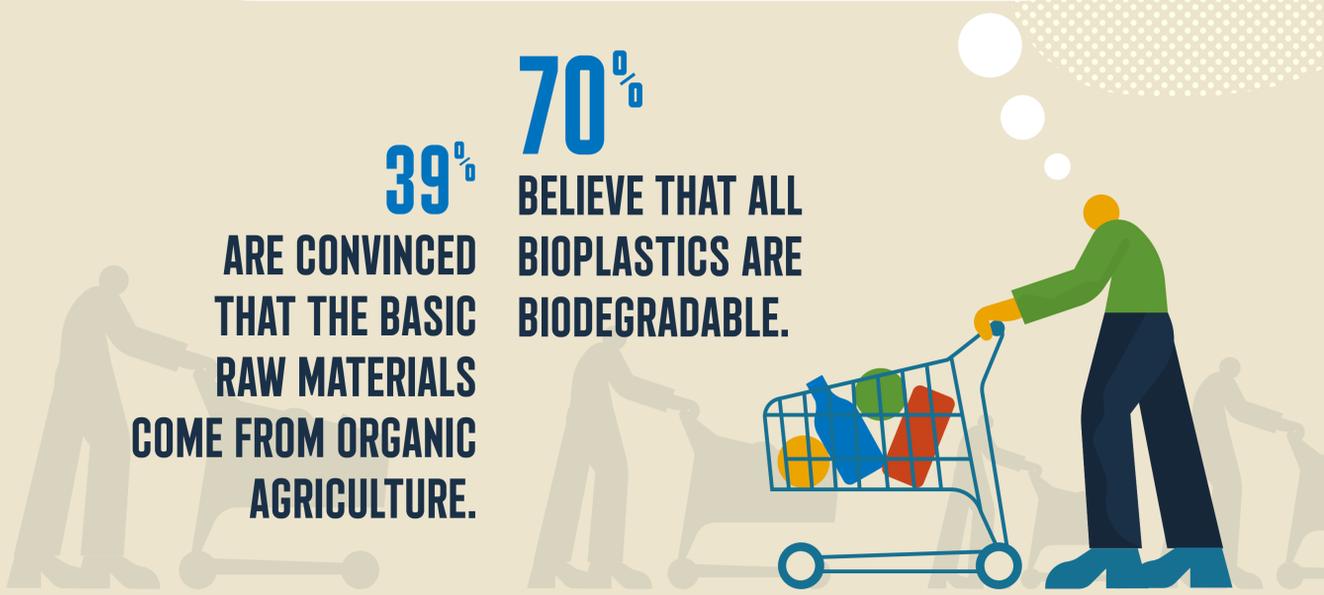
### The problem is that it works.

According to research conducted in Germany, among those who claim to know exactly what bioplastics are:



**39%**  
ARE CONVINCED THAT THE BASIC RAW MATERIALS COME FROM ORGANIC AGRICULTURE.

**70%**  
BELIEVE THAT ALL BIOPLASTICS ARE BIODEGRADABLE.



### And that's where it gets worse...

It has been shown that because of the bioplastic name, people were more inclined to littering.

Based on current forecasts, plastic pollution of the ocean could reach 300 million tons by 2030. Making people believe that bioplastics are not harmful or that they can decompose in natural environments without having an impact may eventually lead to even more pollution.

Plastic pollution is often reduced to a problem of incivility and waste management. However, the best waste is waste which is not produced at all. To solve the problem of plastic pollution, we must act at the source. To achieve this, everyone can take their share of responsibility: companies, local authorities and ourselves, because we are all part of the solution.

# What can we do?!

## PUT PRESSURE ON BUSINESSES

Much of the world's plastic pollution is generated by a handful of brands whose products we consume and packaging we throw away on a daily basis.

Every year, the **Break Free From Plastic** movement conducts an audit of plastic pollution documenting the brands found on plastic waste collected at clean-ups to hold plastic polluting companies accountable.



THE AUDIT SHOWS THAT COCA-COLA, PEPSICO AND NESTLÉ ALONE ACCOUNT FOR 14% OF PLASTIC POLLUTION WORLDWIDE.



## AT OUR SCALE, WE CAN RETHINK THE WAY WE CONSUME

The more we change our purchasing behavior, the greater the impact on brands and players in the sector.



WE REFUSE OVER PACKAGED PRODUCTS

WE INFORM OURSELVES ON WHAT WE'RE BUYING



WE PRIORITIZE REUSABLE PRODUCTS AND BUY IN BULK

WE DON'T GET INFLUENCED BY MARKETING



WE CAN LAUNCH AND SUPPORT CAMPAIGNS TO GET BRANDS TO REACT

I BOYCOTT

## REQUIRE OUR LOCAL AUTHORITIES TO TAKE ACTION

At the local level, authorities can experiment with alternatives to plastics and implement tangible solutions. If this involves rethinking certain habits and needs, it also encourages the development of local actors and contributes to rebuilding social ties.

### 01 Eliminate single-use packaging and plastics in their public procurement



**IN BARCELONA (SPAIN)**

in all municipal services, the use of single-use plastics must be replaced by sustainable alternatives such as water fountains and carafes.

Encourage your city to get rid of plastic bottles: have a look at Surfrider Foundation Europe's good practice guide on plastic bottle-free cities.

READ THIS

### 02 Ban or regulate the use of disposable plastic products in public places or events



**IN BRUSSELS (BELGIUM)**

the city has banned single-use plastics in festivals.



Discover the Surfrider Foundation Europe charter to organize eco-friendly events

READ THIS

### 03 Facilitate access to single-use plastic alternatives

Support the ban on disposable plastics with measures facilitating access to reusable alternatives for all:

- water fountains in public spaces,
- sharing of reusable dishes,
- promotion of retailers offering reusable packaging,
- setting up a local refund system for reusing packaging — etc.



**IN FREIBURG (GERMANY)**

since 2016 the city has been providing retailers with returnable and reusable cups for hot drinks to take away. 26,000 "Freiburg cup" are now in circulation in the city's 112 cafés.

### 04 Mobilize citizens to take up the zero-waste challenge at the local level



**ROUBAIX (FRANCE)**

organizes a Zero Waste Family Challenge. Since 2016, 500 Roubaix families have participated in the challenge and benefitted from workshops and guidance.

## ELIMINATE PLASTIC FROM OUR DAILY LIVES

To drastically reduce our plastic waste, we can act at the source and stop consuming it, this is the challenge of the zero-waste movement.

This means choosing products that are more sustainable within their lifetime, reusable or refillable, without packaging, and optimizing their end of life. No waste should be incinerated or sent to landfill and no toxic substances should end up in the soil, water or air.

Saying this makes sense, but how can we limit our plastic consumption when it is absolutely EVERYWHERE?

### Where should I start?

The list of solutions is long, but here's where to start:

#### AT HOME

Fix things rather than throw them away. You can find tutorials on the internet or get help from an expert:

REPAIRCAFÉ



## AT THE GROCERY STORE

Bring a reusable shopping bag so you don't have to buy one.

Favor as much as possible local shops and short loops.



## AT WORK

Bring reusable containers for your lunch breaks.

Use your own reusable cup for the coffee machine.

To go further...

## MAKE YOUR OWN CLEANING AND COSMETIC PRODUCTS

### OCEAN CAMPUS' TUTORIALS



### GET COACHED TO BE MOTIVATED

The Ocean's Zero application developed by Surfrider Europe is your personal assistant, which brings you through challenges towards a zero-waste way of life.

IOS

ANDROID

## ENJOY GOOD BOOKS (WHICH CAN BE BORROWED FROM THE LIBRARY) TO ADOPT THE TIPS OF ZERO-WASTE EXPERTS



**Zero Waste Home – The Ultimate Guide to Simplifying Your Life by Reducing Your Waste** by Bea Johnson.

Producing virtually no waste while reducing expenses by 40% is the challenge Bea Johnson and her family have taken up. She provides over a hundred tips on how to do this in this book.



**Famille presque Zéro Déchet** by Jérémie Pichon et Bénédicte Moret.

Here, another family, French this time, recounts the torments of their zero-waste experience. A funny and honest story with good anecdotes and a multitude of practical tips.

## SUPPORT THE NGOS, WHICH AMPLIFY OUR VOICES:

Because legislative measures are vital to change practices, NGOs are joining forces to bring citizens' demands to local, national, European and international public institutions:

### At the global level:

The **Break Free From Plastic** movement brings together 1900 NGOs which demand massive reductions in single-use plastics and push for lasting solutions to the plastic pollution crisis. Member organizations run joint campaigns to have the strongest possible impact, including on companies. The movement publishes an annual plastic pollution audit report which identifies the world's top corporate plastic polluters:

### BREAK FREE FROM PLASTIC



### At the European level:

**Rethink Plastic Alliance**, a member of the Break Free From Plastic movement, works together with other NGOs (**Surfrider Foundation Europe, Zero Waste Europe, Greenpeace, Client Earth, etc**) in the fight against plastic pollution. Its objective is to work with European policy makers to design solutions to fight plastic pollution.

The alliance has been particularly involved in the drafting of the European Directive on single-use plastics which must now be transposed into the national law of each Member State by July 2021. It has fought to inform on the dramatic environmental and health impacts of single use plastics, to demonstrate that alternatives are within reach, to justify the need for restrictive measures and to frame definitions so that they do not allow certain products to escape the regulation.

**Rethink Plastic alliance obtained key measures on all single-use plastics covered by the Directive, with no exemption granted for bioplastics.**

For our part, we can convey their message to as many people as possible on social networks, support their campaigns, sign their petitions and take part in their actions.

### RETHINK PLASTIC ALLIANCE

www.qqf.fr  
A Qqf infographic produced in partnership with



#break free from plastic



### SOURCES

Surfrider Foundation Europe | Dalberg & WWF | WWF | Plastic Atlas | Conversio | National Geographic | ADEME | Break free from plastic | Rethink plastic alliance