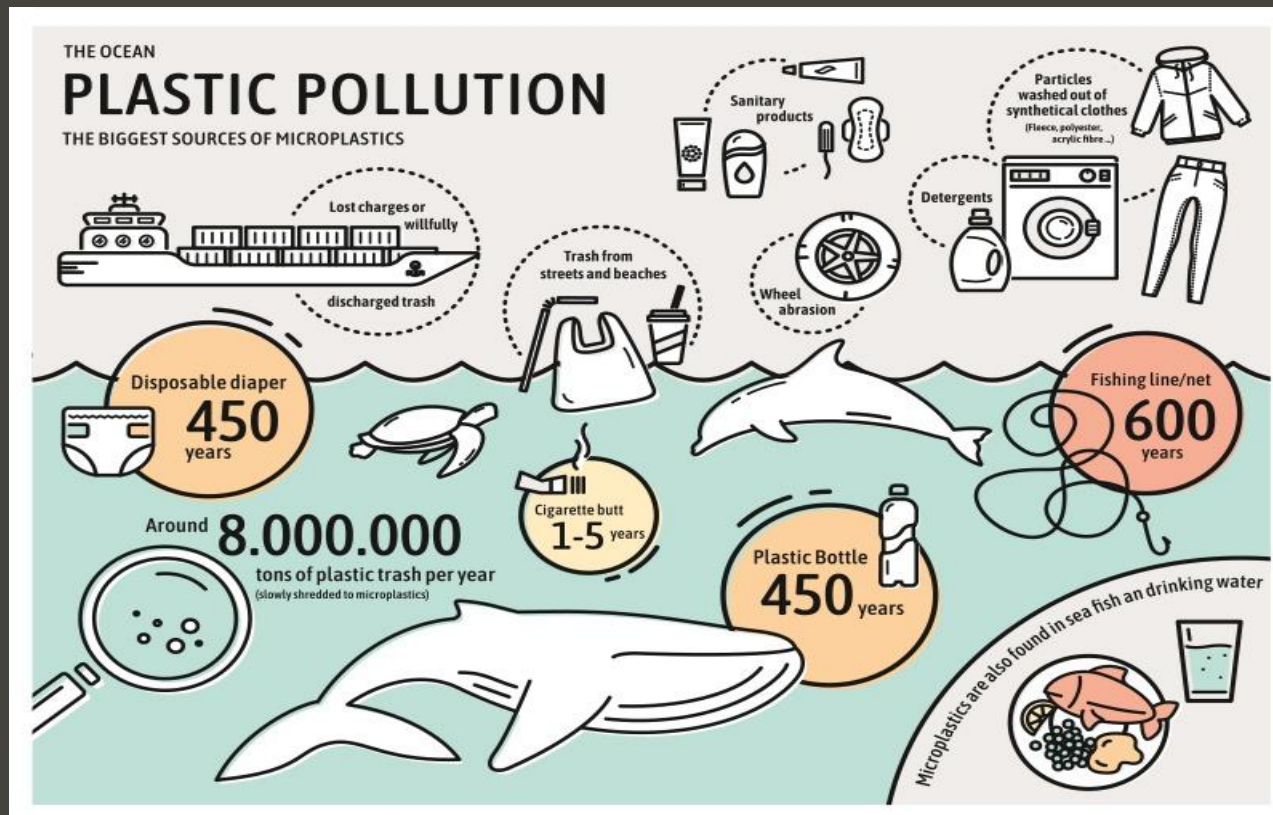
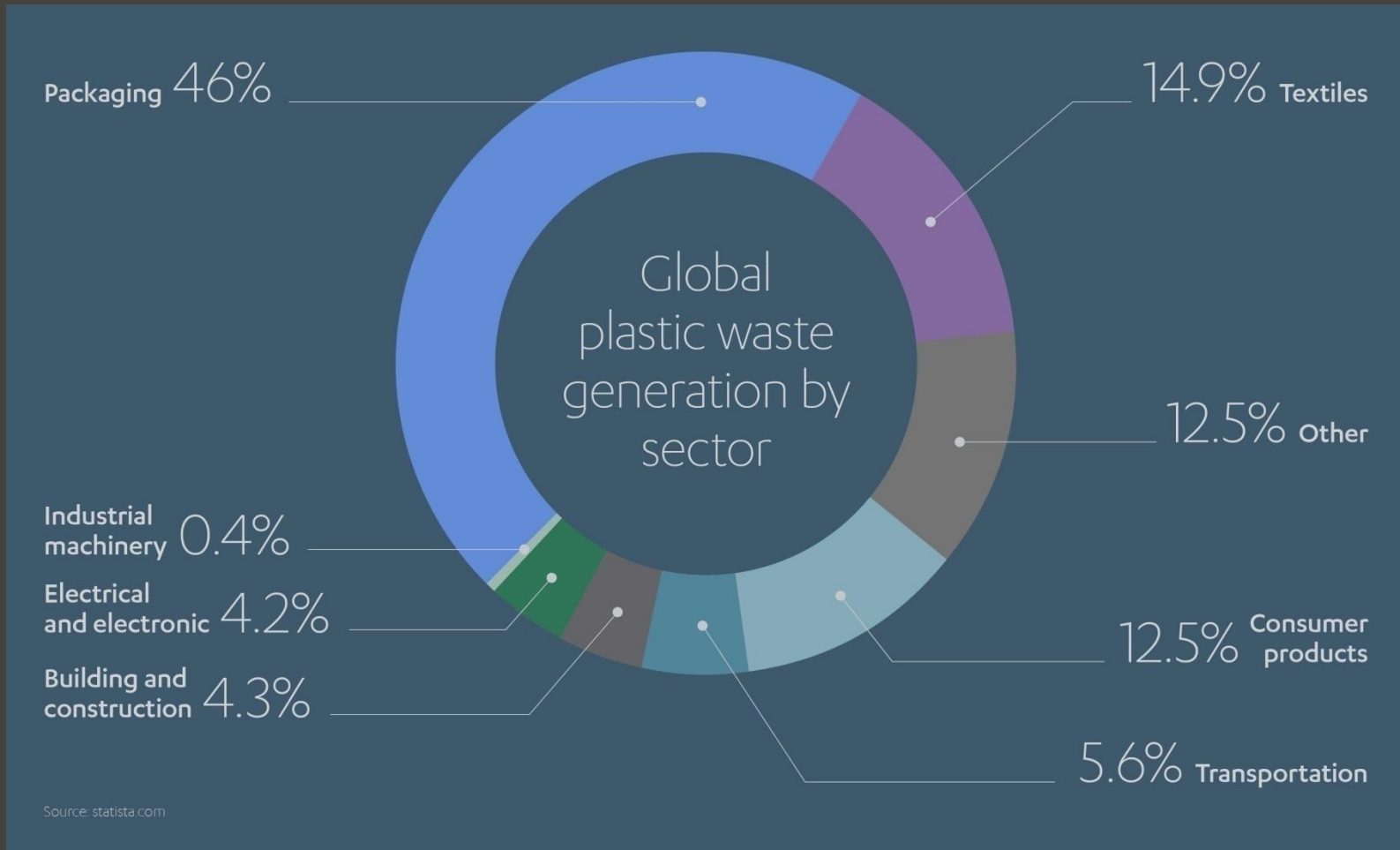


Environmental problems linked to plastic waste

What type of plastics ?



Which sector is the most polluting



Who's pollute the most ?



oceandefender



The Countries Polluting The Oceans The Most

Annual metric tons of mismanaged plastic waste and total amount ending up in global waters¹



Pollution on the continent



Since 1950, the global production of plastic has never stopped to increase, It reached a record level of **320 million tonnes in 2015.**
Equivalent of 10.1 tonnes of plastic per second !!

The Buriganga River, which runs through the capital of Bangladesh, is now so polluted that there are no fish left.

Pollution in the oceans

What impacts ?



THE OCEAN POLLUTION-BERG

PLASTIC WASTE IS JUST THE TIP OF A LARGER PROBLEM

Pollution of the oceans is widespread, worsening, and in most countries poorly controlled. Human activities result in a complex mixture of substances entering the aquatic environment.

More than 80% arises from land-based sources

It reaches the oceans through rivers, runoff, atmospheric deposition and direct discharges. Ocean pollution has multiple negative impacts on ecosystems and human health, particularly in vulnerable populations

1 PLASTIC WASTE

THE TIP OF THE POLLUTION-BERG

Plastic is a rapidly increasing and highly visible component of ocean pollution. An estimated 10 million metric tons enter the seas each year. Plastic pollution threatens marine mammals, fish and seabirds. It breaks down into microplastic and nanoplastic particles containing multiple manufactured chemicals that can enter marine organisms, including species consumed by humans.

2 OIL SPILLS

AN AQUATIC KILLER

Oil spills have occurred with increasing frequency in recent years as the result of growing global demand for petroleum. These spills have resulted in direct release of millions of tons of crude oil and other petroleum products into the oceans. Petroleum-based pollutants reduce photosynthesis in marine microorganisms that generate oxygen. They also disrupt food sources, destroy fragile habitats such as estuaries and coral reefs, and foul beaches.

2

3 MERCURY

QUICKSILVER BULLETS

Mercury is released from two main sources - coal combustion and small-scale gold mining. Exposures of infants in utero when pregnant mothers eat contaminated seafood can cause IQ loss and serious developmental disorders. In adults, mercury increases risks for dementia and cardiovascular disease.

3

4 MANUFACTURED CHEMICALS

A HEADY COCKTAIL

Manufactured chemicals - phthalates, bisphenol A, flame retardants, perfluorinated chemicals and pharmaceutical waste, can disrupt endocrine signaling, reduce male fertility, damage the nervous system, and increase risk of cancer. They can also damage coral reefs.

4

5 PESTICIDES

COLLATERAL DAMAGE

pesticides are specifically designed to have biological effects, and thus even low-dose exposures can affect living organisms, including humans. Pesticides contribute to global declines in fish stocks, and can also reduce human fertility.

5

6 NUTRIENTS

FEEDING FRENZY

Industrial releases, runoff from animal feedlots and human sewage increase frequency and severity of harmful algal blooms (HABs), bacterial pollution and anti-microbial resistance.

6

THE WAY FORWARD

World leaders who take bold, evidence-based action to stop pollution at source will be critical to preventing ocean pollution and safeguarding human health. Measures such as these could help with the six problems.

- 1 Better management of plastic waste
 - Bans on single-use plastic
- 2 Wide-scale transition to renewable fuels
- 3 Banning mercury use
 - Eliminating coal combustion
- 4 Chemical control policies
 - Mandatory premarket toxicity testing
- 5 Bans on persistent organic pollutants (POPs)
 - Control of industrial discharges
- 6 Better treatment of sewage
 - Reduced applications of fertilizers
- ALL
 - Transition to a circular economy
 - Building scientific capacity
 - Embracing green chemistry
 - Designation of Marine Protected Areas (MPAs)

What types of pollution in the oceans ?

FOR MORE INFORMATION, SEE THE FULL PAPER AT:

<http://bit.ly/pollutionberg>



BOSTON COLLEGE



CENTRE SCIENTIFIQUE DE MONACO

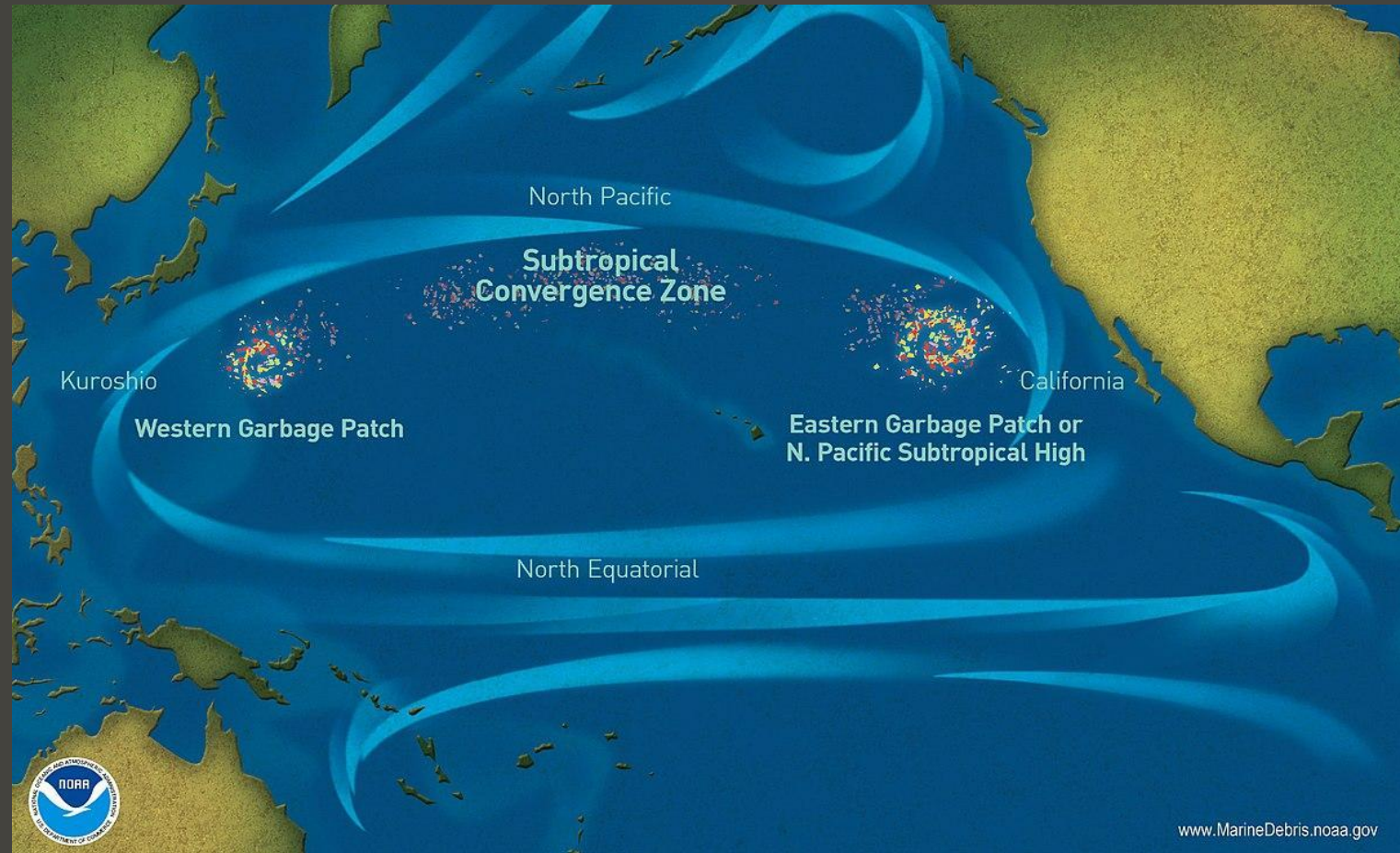
DESIGNED IN 2020 BY WILL STAHL-TIMMINS

**There are some
examples :**





The 7 continent made of plastics



A large, sprawling pile of plastic waste, including bottles, containers, and other debris, stretches across the foreground and middle ground. The sky is a mix of blue and orange, suggesting a sunset or sunrise. The overall scene is one of environmental pollution.

**It isn't too late !
We can still act for a
better future !**

We have different solutions. For example, next to our school we have a company that recycles plastic. And we visited it, our vision of recycling changed. We will share our experience with you !

This company buy our plastics and it has one warehouse for clean and melt it. At the end we have a lot of granule in plastic.

It has an other warehouse, it uses the granules for make recyclable bags. We saw french brand and to british because they work with proximity.

Bio plastic ? French promises !

A french company work out make a plastic with bad algea. So we can see different stages of decomposition of bottol in algea.



Algea
plastic

Disappears after

12 weeks



Petroleum
plastic

Disappears after

250 years

Alternative ?

The european government taked different measures. For example with fastfood : we don't have plastic straw but now we have a lid.



As far as when we were child, we could have a plastic toy but now it's uniquely in carton or paper.



Carton, good or not ?

YES

Carton is more biodégradable than plastic.

We can exchange plastic for carton, but is it really good in every points ?

Whit carton bag you can use it one time or twice. So we use a lot and more.

NO

When this material is associate with an other like plastic film for a cup because it must not have a leak. In this situation, the recycling is impossible so the polution is concealed but still present.



*our health system
affected by plastic*

3



*Who is affected and what
are the plastic issues*

1



*plastic sanity
problem*

*How are we
contaminated by
plastic?*

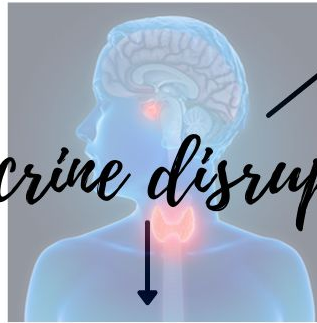
2



1

chemical substance of natural or synthetic origin, foreign to the body and likely to interfere with the functioning of the endocrine system

bisphenol and phthalates



endocrine disruptor

the whole world is concerned

89 billion plastic bottles sold per year worldwide

our body ingests up to 52,000 plastic microparticles per year

Estimates of the lifespan of plastic range from 450 years to infinity.

respiratory:
plastic tablecloths and shower
curtain (new plastic)
cosmetic
deodorant
varnish
perfume
lacquer

2
plastic present
everywhere

Orally:
in contact with food
inside of cans
food box
clingfilm
watter bottles
kettles

Cutaneous:
cosmetic
deodorant
varnish



3

