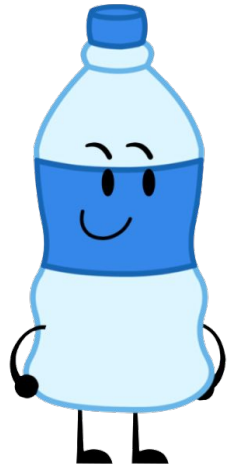


An illustration of a dark blue ocean scene. In the center, a large sea turtle with a green and brown patterned shell swims towards the right. To its right, a colorful clownfish with blue, yellow, and orange stripes swims. Below the turtle, a yellow fish and a small pink fish are visible. On the left, a large red octopus with white suction cups is partially shown. In the upper left, a blue plastic bag floats. In the lower left, a blue water bottle and a blue packet labeled 'SWEET TREATS' are scattered. In the lower center, a green toothbrush floats. On the right, a large orange plastic bag and a clear plastic cup are shown. A large, translucent jellyfish with a white bell and pinkish-red tentacles is prominent on the right side. The background is dark blue with several white bubbles of varying sizes.

# Plastic pollution in the marine environment

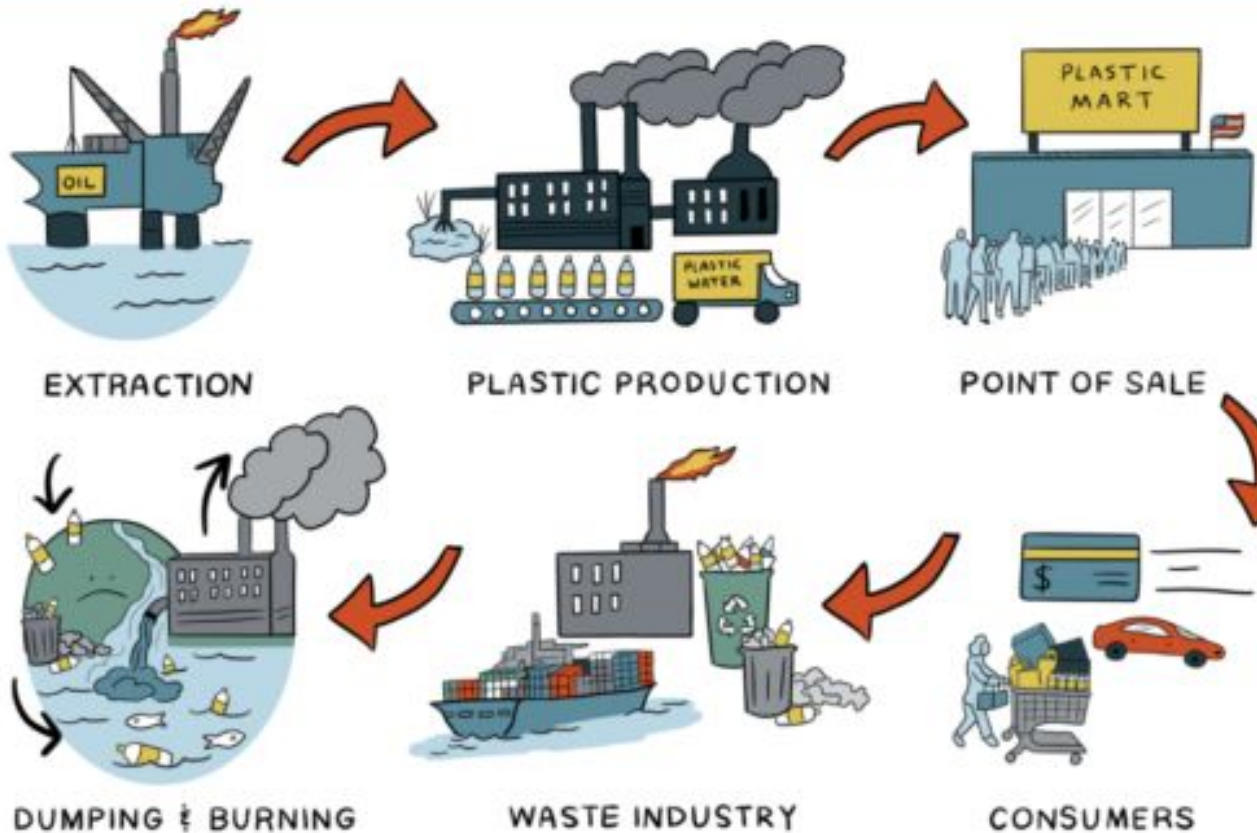
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# How is plastic produced?



# PLASTIC POLLUTION LIFECYCLE

It is estimated that approximately "100 million tons of plastic are generated (globally) each year", and about 10% of that plastic ends up in the oceans.



# Garbage patches

This high amount of plastics assembles due to currents of water in areas called **garbage patches** which are **like giant islands made of plastics!**

These human-caused collections of plastic and other debris, cause ecosystem and environmental problems that affect marine life, contaminate oceans with toxic chemicals, and contribute to greenhouse gas emissions.

There are multiple patches spread to every ocean. The best known of these is the *Great Pacific garbage patch* which has the highest density of marine debris and plastic, **visible from space.**





N. Pacific

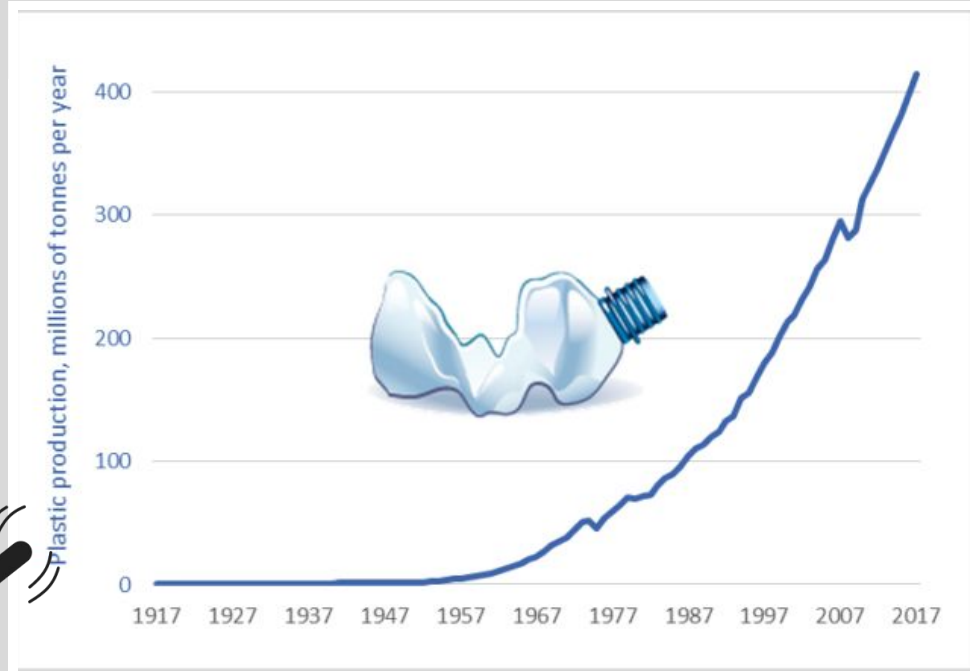
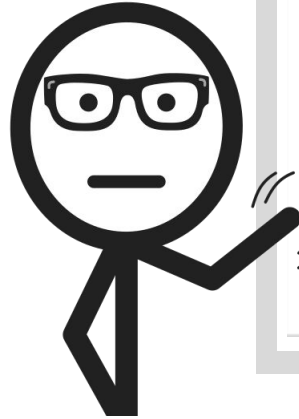
N. Atlantic

S. Pacific

S. Atlantic

Indian

*In the last 50 years plastic production has skyrocketed*



## What are you doing about plastic waste?



EU average

Source:  
Eurobarometer



**65%**

separate waste  
for recycling



**34%**

avoid single-use goods  
like cutlery & cups



**24%**

avoid buying  
over-packaged products



**70%**

use fewer  
single-use plastic bags

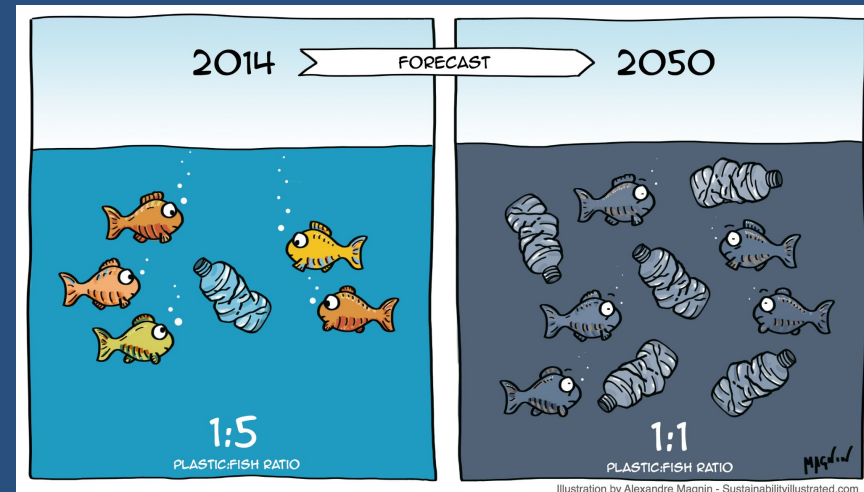
<https://europeancommission.medium.com/5-ways-the-eu-is-working-to-fight-plastic-pollution-e6d26500d47b#:~:text=A%20circular%20economy%20for%20the,consumption%20of%20single%2Duse%20plastic>  
[S.](#)

(what has the E U done to reduce the use of plastic)

# How are the marine animals affected?

Marine animals may ingest plastic garbage and as a result they may suffer from:

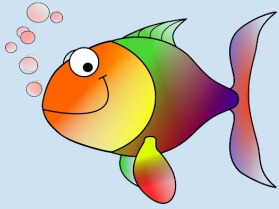
- Choking
- Intestinal injury
- Starvation to death (due to reduction of stomach storage volume)
- Bioaccumulation of plastic through the food chain
- Harmful changes in their body chemistry





# What marine species are affected?

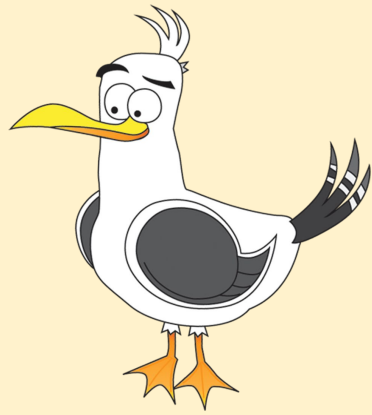
Fish

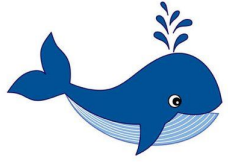


# Sea turtles

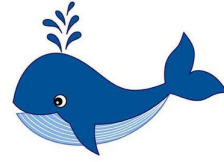


Sea birds





# Marine mammals



# How long does it take to decompose?

Foam plastic cup  
50 years



Plastic bag  
10-20 years



Plastic straw  
up to 200 years



Six pack holders  
400 years

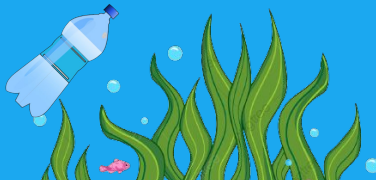


Plastic bottles  
450 years





Where do plastic bottles end up?

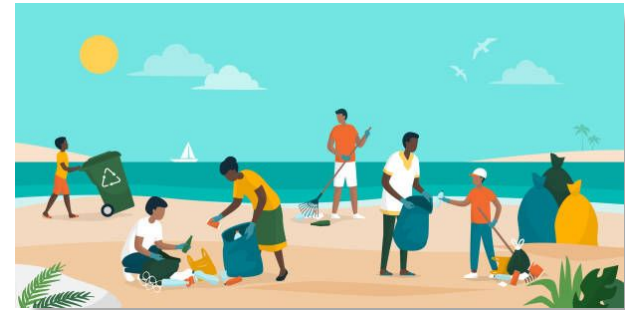
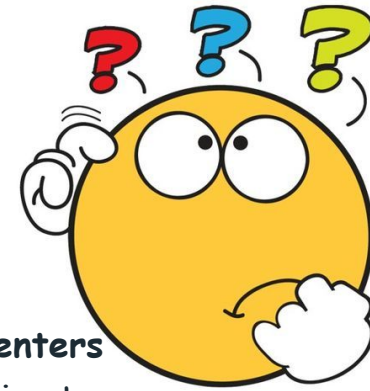
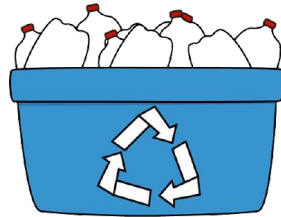


# So, what can we do about ocean plastic pollution?

Everyone can do something to **reduce** the amount of **plastic** that **enters** the **ocean**, and millions of people worldwide are already taking action to reduce their plastic use.

Plastic pollution of the seas affects each and every one of us. Only if we take immediate action we can stop its rapidly increasing rate. Why not start now from changing little things in our daily routine?

There are lots of ways we can help!



# Stop using disposable plastics!

90% of the plastic items in our daily lives are **used once and then chucked**: grocery bags, plastic wrap, disposable cutlery, straws, coffee-cup lids. **Replace them with reusable versions.**





# Enough with the plastic bottles!

Each year, close to **20 billion plastic bottles** are tossed in the trash. **Carry a reusable bottle** in your bag!



## Recycle (duh)!

It seems obvious, but we're not doing a great job of it. For example, **less than 14 percent** of plastic packaging is recycled.



# Spread the Word!

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Stay informed on issues related to plastic pollution and help make others aware of the severity of problem. **We all have to contribute!**





Thank you for your attention!

Charis Vamvakos

Marissa Migka

Marini Zempila

Polyxeni Kyriazi

Stela Marku