

Chapter 2 - COP21

Introduction to the topic

COP21 – December 2015 – Paris, France

Introduction – Home a must-see movie

Step 1 - Understanding the issue at stake

Asking ourselves questions about the environment.

Watching the video "It's a plastic world" to find some answers.

Why isn't plastic biodegradable (How does plastic decompose?)

Step 2 - Another way to look at waste

Step 3 – Solutions

Solution n°1

Solution n°2

Solution n°3

Final Mission

Make a 3-minute speech at the COP21

Introduction to the topic

COP21 – December 2015 – Paris, France

Laurent Fabius introduces Paris 2015 - COP21/CMP11

<https://youtu.be/kJyY5xmFrpY>

Many nations **will meet to** speak about the climate.

Global warming and pollution have **a real impact on** the planet and politicians will speak about the consequences/effects/impacts.

They want to find some solutions because we are **the last generation that can act** before the **living conditions** will be too hard/will become **unsuitable for** human beings.

Introduction – Home, a must-see movie

HOME

<https://youtu.be/jqxENMKaeCU>

Home is a documentary film directed by Yann-Arthus Bertrand. It is about Planet Earth, that / which is at the perfect distance* to the Sun, not too **far**, not too close.

150 million kilometres / 93 million miles

The climate of the Earth is changing faster so

the goal / objective of this movie is **to make people aware of** global warming, pollution **issues**.

this movie **aims at making** people aware of global warming, pollution issues.

This movie **talks about / deals with** the various consequences, impacts, effects of consumption of Earth's resources **such as** **rising sea-levels**, rising temperatures, **soaring carbon dioxide emissions**, North Pole and South Pole's **caps melting**, deforestation and so on.

Moreover, in addition to that, Yann-Arthus Bertrand shows the beautiful landscapes (in order) **to raise public awareness**.

Vocabulary : landscapes : paysages

to raise public awareness : sensibiliser les gens

Your notes :

Step 1 - Understanding the issue at stake

Asking ourselves questions about the environment.

There are so many things we still don't know. Students ask themselves questions.

- 01) Why do we throw plastic in the brooks, rivers, seas and oceans?
- 02) Why do humans use hundreds of millions of tons of plastic?
- 03) Why do we need plastic?
- 04) Why is plastic polluting?
- 05) Is plastic an essential thing?
- 06) Why do the fish eat the plastic particles, the plastic parts?
- 07) Why does the world not react before?
- 08) When did the world not react when we found out about the problem / issue.
- 09) How many tons of plastic are thrown into the sea per year / each year / yearly.
- 10) How much plastic is thrown into the sea?
- 11) Why don't we recycle plastic?
- 12) Why does plastic contain many toxins?
- 13) What is the consequence of pollution in the mountains?

Watching the video "It's a plastic world" to find some answers.

It's a plastic world

<http://itsaplasticworld.com/>

It is everywhere. We need it. We want it. **We even find it in places where we wouldn't expect it.**

When researchers examined the stomach of a beached sperm whale in 2012, they found 30 square meters of tarpaulin, a four-and-a-half-meter long hose, a nine meter long plastic rope, and two flower pots. How is this possible? **On average**, a European **uses** and **disposes** of more than 100 kilogrammes of plastic per year.

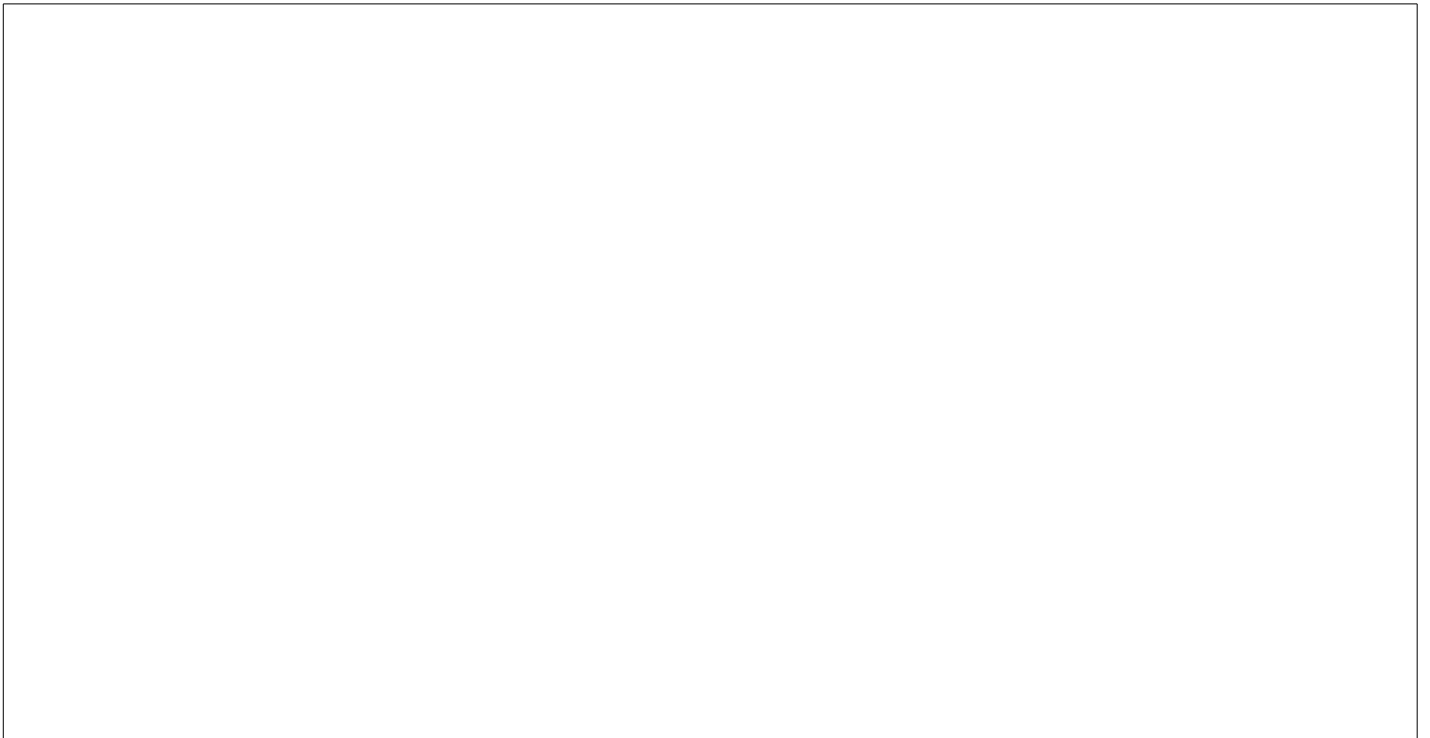
The large part of plastic waste **ends up** on huge **landfills**, or in the sea. Today, more than 100 million tonnes of plastic is **drifting around** the oceans. **Due to particular currents** in the Pacific Ocean, a new continent has been born, a mass of plastic waste **the size of Europe**. **In some areas** of the oceans, **there is up to sixty times as much plastics as there is plankton** Because plastic does not rot, it lasts up to 500 years. Through exposure to sun, wind and water, plastic is broken down into microscopic parts. These plastic particles can absorb high concentrations of agricultural and **industrial toxins**. Many **animals mistake the plastic for plankton** and eat their fill. Every year more than 100,000 turtles, **marine mammals** and **sea birds** die a slow and painful death, because they starve with a full stomach, or because their intestines rupture. Other marine creatures in whose cells plastic and toxins have accumulated **end up as seafood** on our plates. The smallest form of plastic are microplastics. They are added to cosmetics, shower gels and toothpastes. A tube of toothpaste contains up to ten percent microplastics. But **sewage plants** cannot filter microplastics, so they too end up in the sea.

In the making of plastic, **hazardous chemicals** are used in order **to enhance elasticity or fire resistance**.

Bisphenol A, plasticisers or **flame retardants are contained in** almost every plastic product. Through exposure to heat the wrong detergents, or simply over time, plastic will go brittle, thus **releasing these chemicals**, which in turn, through the airways, ingestion, or through mere touch, **find their way into the human body**. The

Step 2 - Another way to look at waste

“While there is a lot of plastic in oceans [after all](#) we can recover it and reuse it” claims Captain Charles Moore who discovered the Great Pacific Garbage Patch in 1997.



Step 3 - Solutions

Solution n°1

World's first ocean cleaning system to be deployed in 2016

By: The Ocean Cleanup Team

Deployment will become longest [floating structure](#) in world history

Boyan Slat, 20-year old [founder](#) and [CEO](#) of The Ocean Cleanup, today [announced](#) that the world's first system to passively clean up plastic pollution from the world's oceans [is to be deployed in 2016](#). He [made](#) the [announcement](#) at Asia's largest technology conference, Seoul Digital Forum, in South-Korea.

The array is [projected to be deployed](#) in Q2 2016. The [feasibility of](#) deployment, off the coast of Tsushima, [an island](#) located in the waters between Japan and South-Korea [is currently being researched](#).

The system will span 2000 meters, thereby becoming the [longest floating structure ever deployed](#) in the ocean (beating the current record of 1000 m held by the Tokyo Mega-Float). It will be operational for at least two years, catching plastic pollution before it reaches the [shores](#) of the proposed deployment location of Tsushima island. Tsushima island is evaluating whether the [plastic](#) can be [used as an alternative energy source](#).

The scale of the plastic pollution problem, whereby in the case of Tsushima island, approximately one cubic meter of pollution per person is washed up each year, has led the Japanese the local government to seek innovative solutions to the problem.

The deployment will represent an [important milestone](#) in The Ocean Cleanup's mission to [remove plastic pollution](#) from the world's oceans. Within five years, after a series of [deployments of increasing scale](#), The Ocean Cleanup plans to deploy a 100km-long system to clean up about half the Great Pacific Garbage Patch, between Hawaii and California.

Boyan Slat, founder and CEO of The Ocean Cleanup: *"Taking care of the world's ocean garbage problem is one of the largest environmental [challenges mankind faces](#) today. Not only will this first cleanup array contribute to cleaner waters and coasts but it simultaneously is [an essential step towards our goal of cleaning up the Great Pacific Garbage Patch](#). This deployment will [enable](#) us to study the system's efficiency and durability over time.*

Glossary

[bin](#) : An object in which we throw things we don't need anymore.

[deploy](#) : to implement

[enable](#) : to make possible. Electricity _ _ _ _ _ s people to use computers. Electricity makes the use of computers possible. Electricity allows people to use computers.

[Float](#) : When an object remains on the surface of water and doesn't sink, we say it _ _ _ _ _ s.

[issue](#) : problem

[milestone](#) : an important innovation, a landmark, a breakthrough, an important moment, a major technological innovation.

[Moore](#) : Last name of the Captain who discovered the Great Pacific Patch in 1997.

[plankton](#) : Tiny living marine organisms on which fish feed on. Unfortunately, plastic is sometimes mistaken for _ _ _ _ _

[rubbish](#) : British word which is synonym of trash, garbage, refuse, litter, waste

Crosswords

Based on Glossary vocabulary.

Solution n°2

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Solution n°3

A large, empty rectangular box with a thin black border, occupying the lower half of the page. It is intended for the user to write the solution for the third problem.

Your final mission

You are invited to make a speech at the COP21

Make a 3-minute speech about the plastic pollution issue and propose solutions for the future.

Prepare yourself to speak in front an audience of 30 people about :

- the issue you have learned about,
- the solutions you think could be implemented throughout the world.

You can use a few notes (keywords, not sentences).

Don't hesitate to show ideas from your personal viewpoint.

