



A deep dive into the world of plastic and it's effects on SDG-14.

Harmen Spek

Manager Innovations & Solutions www.plasticsoupfoundation.org

(from natural latex to strong cartyres)

1856 - Celluloid

(from cellulose to solid forms)

**1892** - Viscose

(the first 'hand-made' yarn)

Fossilbased 1907 - Bakelite

(the first synthetic plastic – based on facility il)



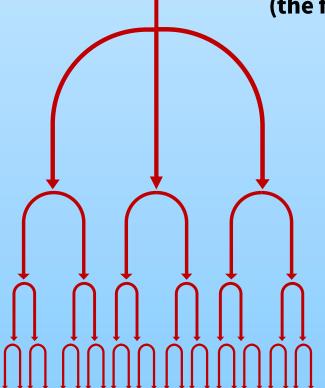
INDUSTRIAL REVOLUTION!







(the first soft and flexibele plastic)



PLASTIC REVOLUTION!





## Throw Away Living

1950





## Good things are twice as good in Cellophane



you buy ... no



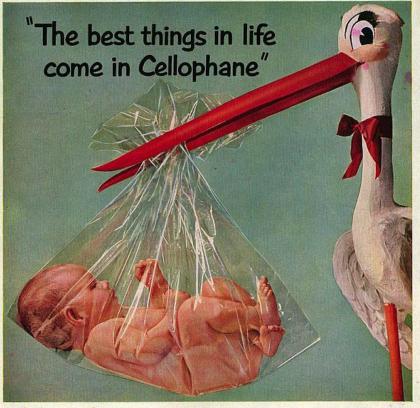
stay fresh longer.



Cellophane are clean and manitary.













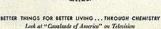












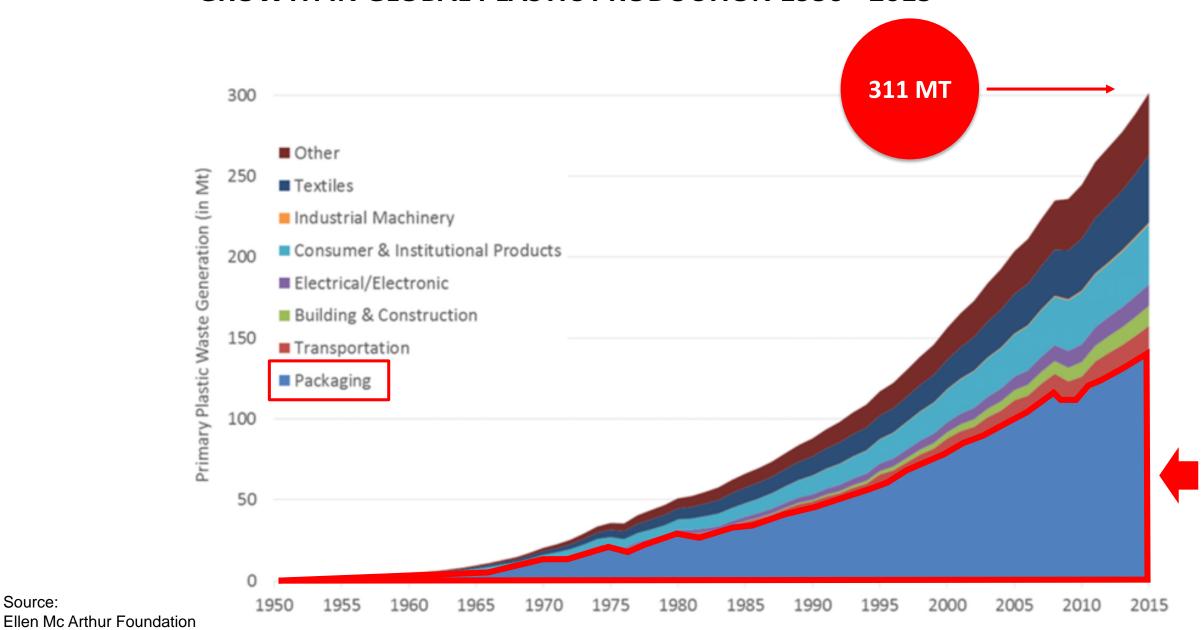
## **'OUR OWN' PLASTIC ENVIRONMENT**

safety | hygiene | comfort



#### **GROWTH IN GLOBAL PLASTIC PRODUCTION 1950 - 2015**

Source:







#### **MARIANA TRENCH**







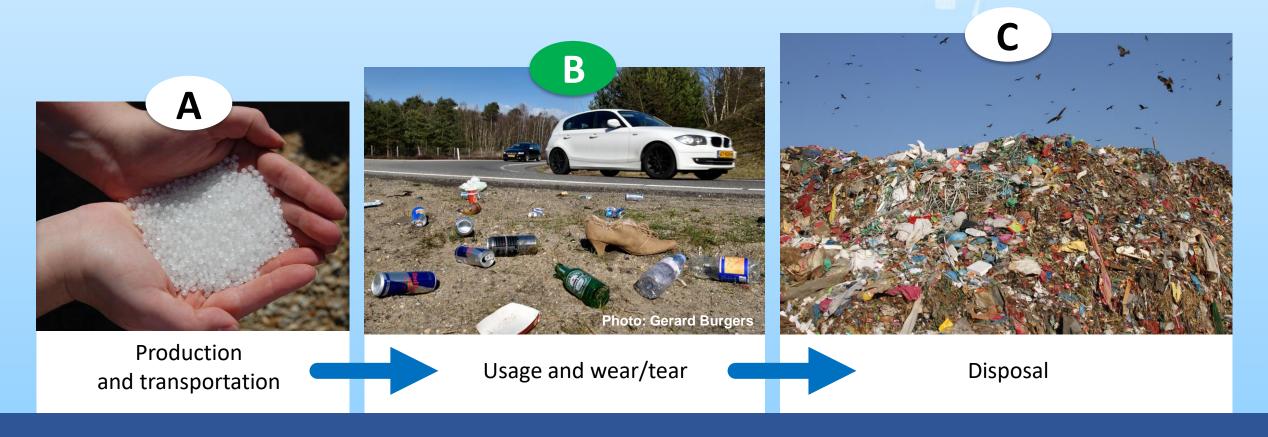






#### PLASTIC EMISSION = 3%+ OF ANUAL PRODUCTION

## 12 MILLION TONNES ANUALLY



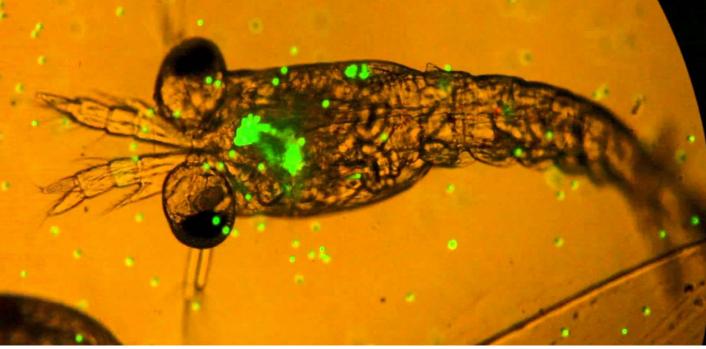
We use it, we lose it!

#### Microplastics captured at sea



Photo's: 5Gyres.com

- persistent organic pollutants & additives -



At the bottom of the foodchain!

## **BIGGEST MATERIAL EMMISSION OF OUR TIME!**



Coronavirus: Venice canals clearer after lockdown

'Wave of silence' spread around world during coronavirus pandemic

Pollution made COVID-19 worse. Now, lockdowns are clearing the air.

Is this the 'Reset Button' for nature?

#### Covid-19

#### **Medical waste According to WHO:**

Up to 10x more medical waste is generated globally.

- Hospitals in Wuhan generated 240 tons of medical waste per day compared to 50 tons on everage.
- Lots of

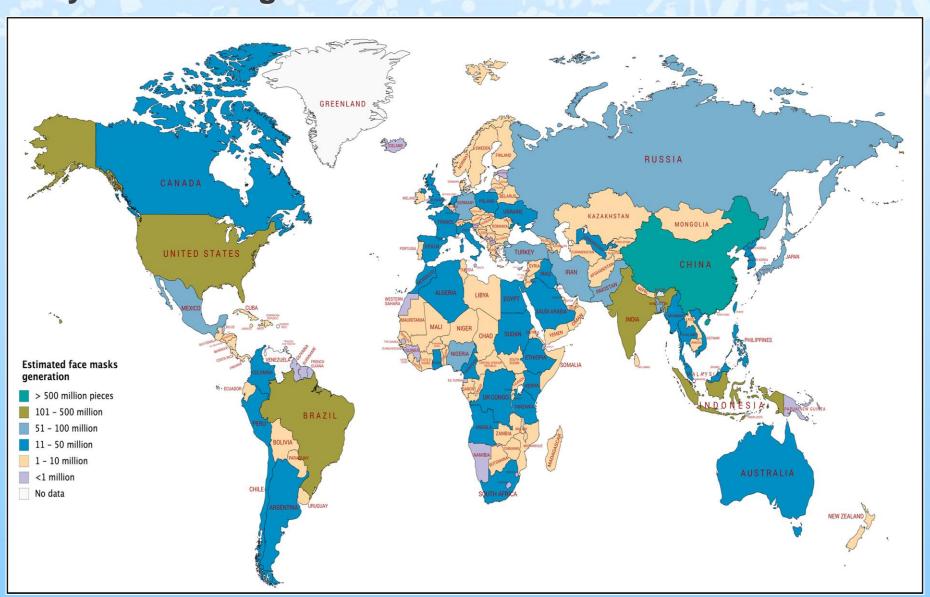


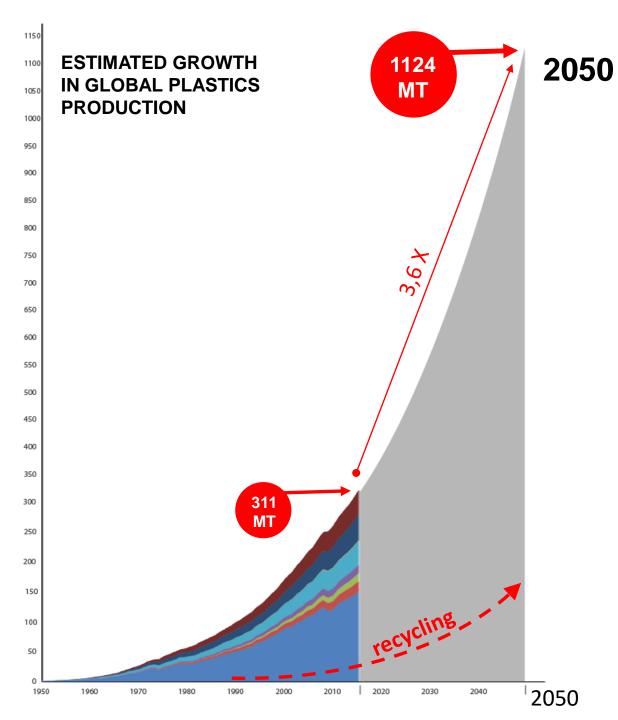




#### Covid-19

#### Daily face mask generation





## Plastic overload!

# VOLUMES WIL GET UNMANAGEABLE!

Source: Ellen Mc Arthur Foundation

#### **PLASTIC RECYCLING CHALLENGES:**

**VOLUME, DIVERSITY AND COMPOSITION** 



145.000
Plastictypes or 'grades'

## Microplastics





Added microplastics





Wear from car tires

#### Plastics are:

## **OMNIPRESSENT**

Microplastics are found in:

AIR - WATER - SOIL - FOOD

## WHAT ABOUT OUR HEALTH?



## Plastic en health – Plastic Health Summit 2020

- 1. Plastic in the blood of cows and pigs
- 2. Plastic uptake by lettuce, apples and carrots
- 3. White blood cell problems
- 4. Plastic in the placenta





## What insight did Covid-19 pandemic bring us?

1. Nature showed us that it is resilient and always eager in restoring the balance.

But the balance between plastics and nature has already been skewed for a very long time.

So, we must restore this balance asap.

2. We are still addicted to plastic no matter what!

#### What change is needed?

- 1. Cutting down on our plastic consumption habbits wherever possible.
- 2. Development of safer materials that are closer to natural processes and lifespans (or use excisting materials that do).
- 3. Stop the narative of plastic waste as a 'solvable' businesscase.
- 4. Stop the plastictrade! And take responsability for your own waste.
- 5. Create plastic regulations that respect the environment and the living conditions of us and our fellow earthlings.



# FOUNDATION SOUP

Thank you



