

# Environmental Education – Small Actions With Big Impacts



Cultivating Futures



Associação Educativa para o Desenvolvimento da Criatividade

# Imperfect Environmentalists

**The world needs millions of Imperfect Environmentalists!**

**"We don't need few Perfect Environmentalists, doing everything perfectly, we need millions doing small actions, millions of Imperfect Environmentalists"**



Small  
Actions



Long term /  
many people



Big  
impacts

**"The biggest mistake of all is not doing anything because you think you're doing too little. Do everything you can!"**

# Imperfect Environmentalists



We don't need to become the most perfect environmentalists in the world,  
it's not a matter of achieving perfection, of achieving zero waste,  
it's a matter of making better decisions.  
The simple fact that we want to improve is the first steep!



“I can't do all the good the world needs,  
but the world needs all the good I can do.”

Jana Stanfield



# Imperfect Environmentalists

**You don't have to**



stop buying completely to reduce excessive consumption



use all food scraps to reduce food waste



Be vegan to reduce consumption of animal products



Stop using a car or plane to reduce your carbon footprint



eliminate all disposable plastic to reduce your trash



be an environmental activist to inspire people around you



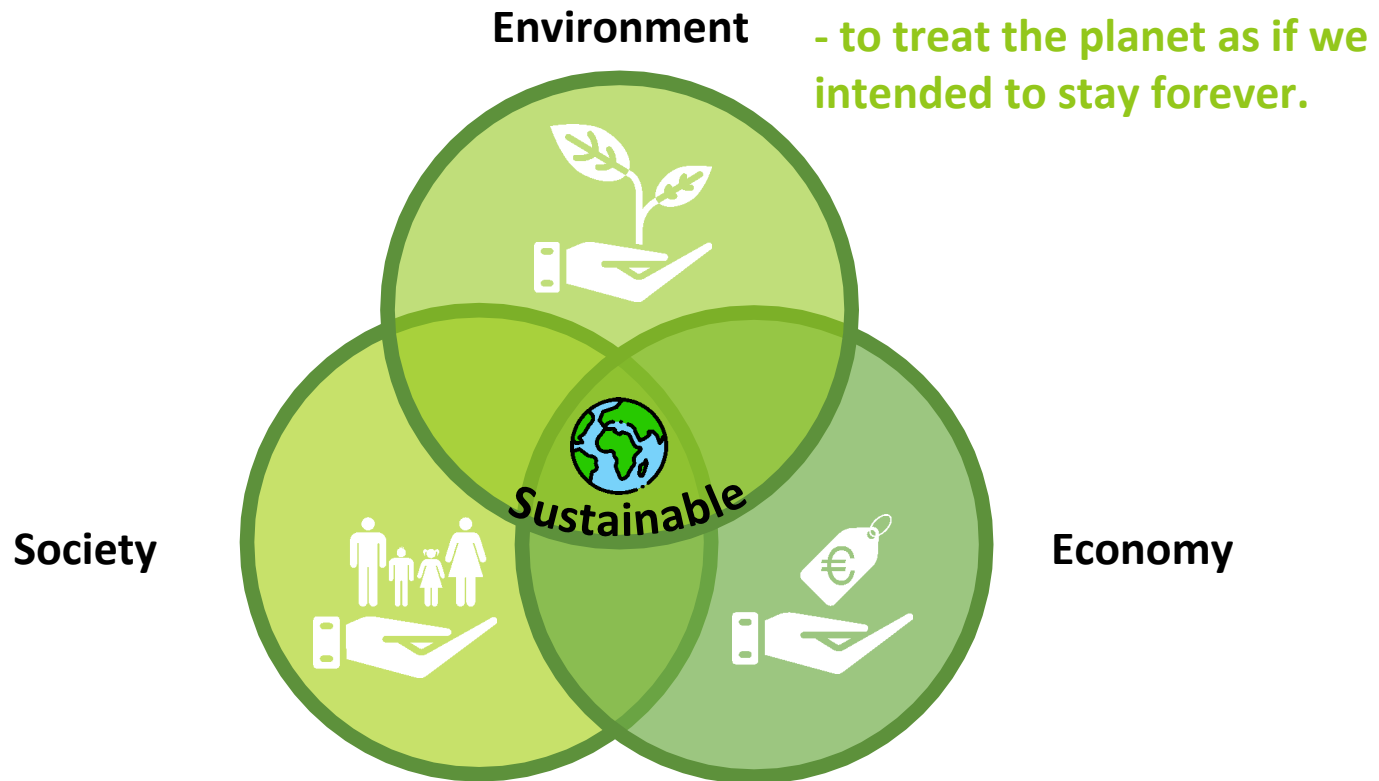
# Sustainable Development Goals

## SUSTAINABLE DEVELOPMENT GOALS



# Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. It seeks to reconcile economic development with the protection of social and environmental balance." Brundtland Report, 1987.



# There is no Planet B

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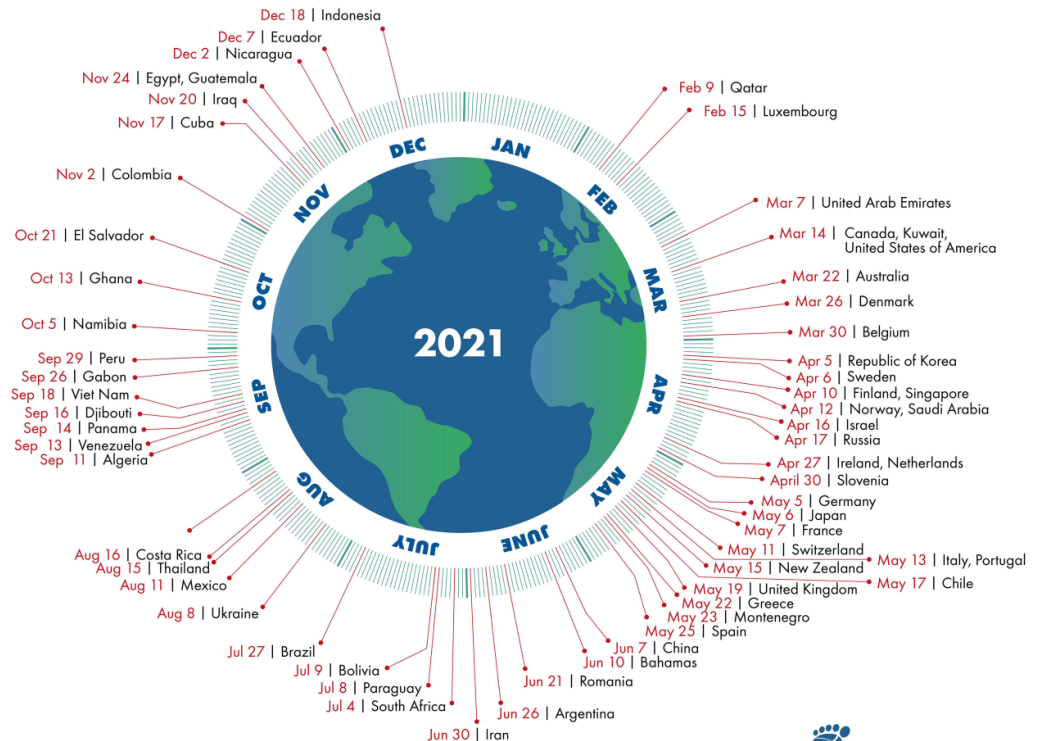
# Earth Overshoot Day

**Earth Overshoot Day** marks the date when humanity's demand for ecological resources and services in a given year exceeds what Earth can regenerate in that year.

In 2021, it fell on July 29.

## Country Overshoot Days 2021

When would Earth Overshoot Day land if the world's population lived like...



Source: National Footprint and Biocapacity Accounts, 2021 Edition  
data.footprintnetwork.org



# Move the date

## The current trend is not our destiny: #MoveTheDate

The past does not necessarily determine our future. Our current choices do. Through wise, forward-looking decisions, we can turn around **natural resource consumption trends** while improving the quality of life for all people.

While our planet is finite, human possibilities are not. The transformation to a sustainable, carbon-neutral world will succeed if we apply humanity's greatest strengths: foresight, innovation, and care for each other. The good news is that this transformation is not only technologically possible, it is also economically beneficial and our best chance for a prosperous future.

In fact, facilitating this transformation is the best strategy for the long-term success of any organization, including and especially businesses. Learn more about the one-planet prosperity strategic framework in the **new e-book by Global Footprint Network and Schneider Electric**.

We have identified five key areas that are defining our long-term trends most forcefully. All of them are shaped by our individual and collective choices:



### PLANET



#### How we help nature thrive

Humanity's quality of life is dependent on the health of our planet's biological resources including fertile soil, clean water, and clean air necessary for humanity to thrive. [Learn More](#)

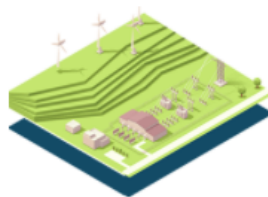
### CITIES



#### How we design and manage cities

Eighty percent of the world population is expected to live in cities by 2050. City planning and urban development strategies are instrumental to balancing the supply of natural capital and population's demand. [Learn More](#)

### ENERGY



#### How we power ourselves

Decarbonizing the economy is our best possible chance to address climate change, and would improve the balance between our Ecological Footprint and the planet's renewable natural resources. [Learn More](#)

### FOOD



#### How we produce, distribute, and consume food

How we meet one of our most basic needs—food—is a powerful way to influence sustainability. Sourcing food locally and avoiding highly processed foods can lower the Ecological Footprint. [Learn More](#)

### POPULATION



#### How many of us there are

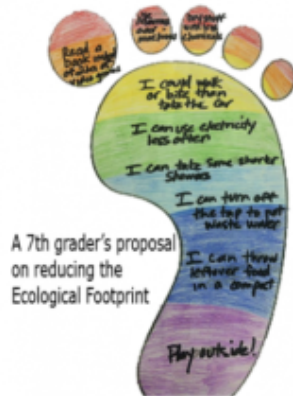
Being committed to everyone living secure lives in a world of finite resources requires addressing population growth. Empowering women is essential for global sustainability. [Learn More](#)

# Move the date



[ABOUT](#) [BLOG](#) [SOLUTIONS](#) [100 DAYS OF POSSIBILITY](#) [NEWSROOM](#) [FOR KIDS & TEACHERS](#) [SUBSCRIBE](#) [DONATE](#)

## Classroom Activities



A 7th grader's proposal on reducing the Ecological Footprint

**Footprint Calculator:** Measure your own Ecological Footprint with an online Footprint calculator (desktop computer required, available in several languages). The calculator tells you how many Earths would be required if everyone on the planet lived like you, and then suggests ways to reduce your Ecological Footprint. [footprintcalculator.org](http://footprintcalculator.org)

**Footprint Drawing:** Suggest ways to reduce your Ecological Footprint in a drawing like the one by the seventh grader at left.

**Lesson Plan:** [What day is Earth Overshoot Day?](#) (appropriate for 6th-12th Grades). The purpose of this activity is to understand the concepts and metrics of Ecological Footprint and biocapacity, and why addressing ecological resource constraints is essential to global sustainability.

**Footprint Futures:** Global Footprint Network's university-level curriculum. [www.footprintnetwork.org/2016/05/01/footprint-futures](http://www.footprintnetwork.org/2016/05/01/footprint-futures)

**Population Conversation:** Population is a particularly challenging and sensitive topic, yet its impact is underestimated. If presented well, discussing the population factor can be an empowering and engaging learning opportunity. We created materials for engaging classroom discussions, starting with voices from around the world addressing the question "[should we even discuss population?](#)" The voices are complemented with [an in-depth essay](#), which strengthens teachers' background on the topic and

includes a list of questions to stimulate classroom conversations. For the more mathematically inclined, we produced a [downloadable population cohort calculator sheet](#) to project population change.

**Tasty Leftovers:** Create a sandwich with leftovers. If you are in Italy, take a picture and win: [foodrightnow.it/la-tua-ricetta-contro-lo-spreco](http://foodrightnow.it/la-tua-ricetta-contro-lo-spreco)

Create your own activity: Email us at [socialmedia@footprintnetwork.org](mailto:socialmedia@footprintnetwork.org) to tell us what you will do about your Ecological Footprint.

## Additional Resources

Footprint Futures, a university-level curriculum for exploring the sustainability challenge facing human economies, from [Global Footprint Network](#).

A hands-on, inquiry-based, curriculum for year 9 or year 10 students on global warming and renewable energy from the [Australian Academy of Technological Sciences and Engineering](#).

# There is no Planet B

Worldwide, we use the equivalent resources of 1.7 planets.

If everyone lived like the Portuguese, 2.8 Earth planets would be needed.





# Ecological Footprint

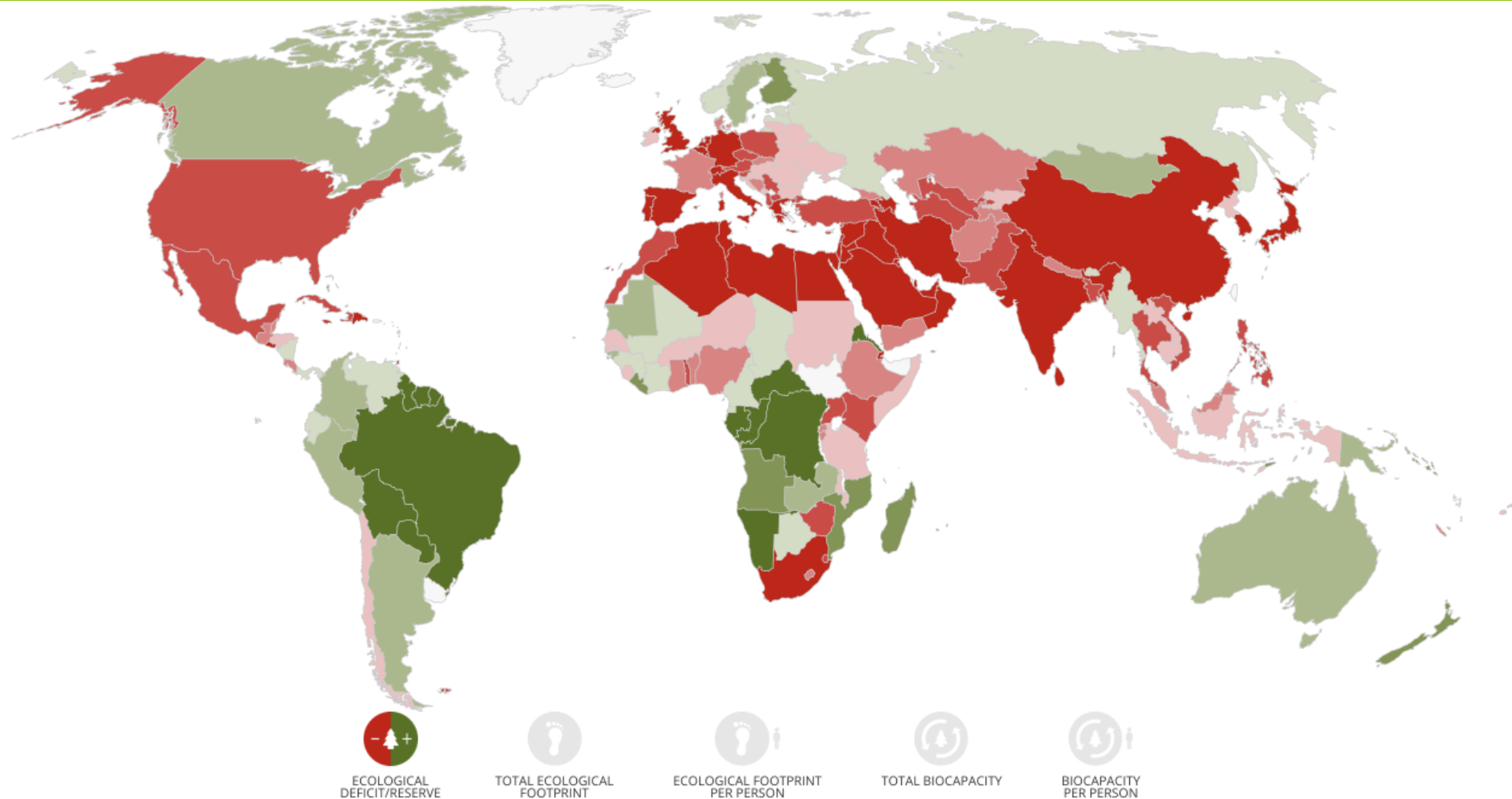




# Ecological Footprint and Carbon Footprint



# Ecological Footprint



## ECOLOGICAL DEFICIT/RESERVE

An ecological deficit occurs when the [Ecological Footprint](#) of a population exceeds the [biocapacity](#) of the area available to that population. A national ecological deficit means that the nation is importing biocapacity through trade, liquidating national ecological assets or emitting carbon dioxide waste into the atmosphere. An ecological reserve exists when the biocapacity of a region exceeds its population's Ecological Footprint.

## BIOCAPACITY CREDITORS

BIOCAPACITY GREATER THAN FOOTPRINT

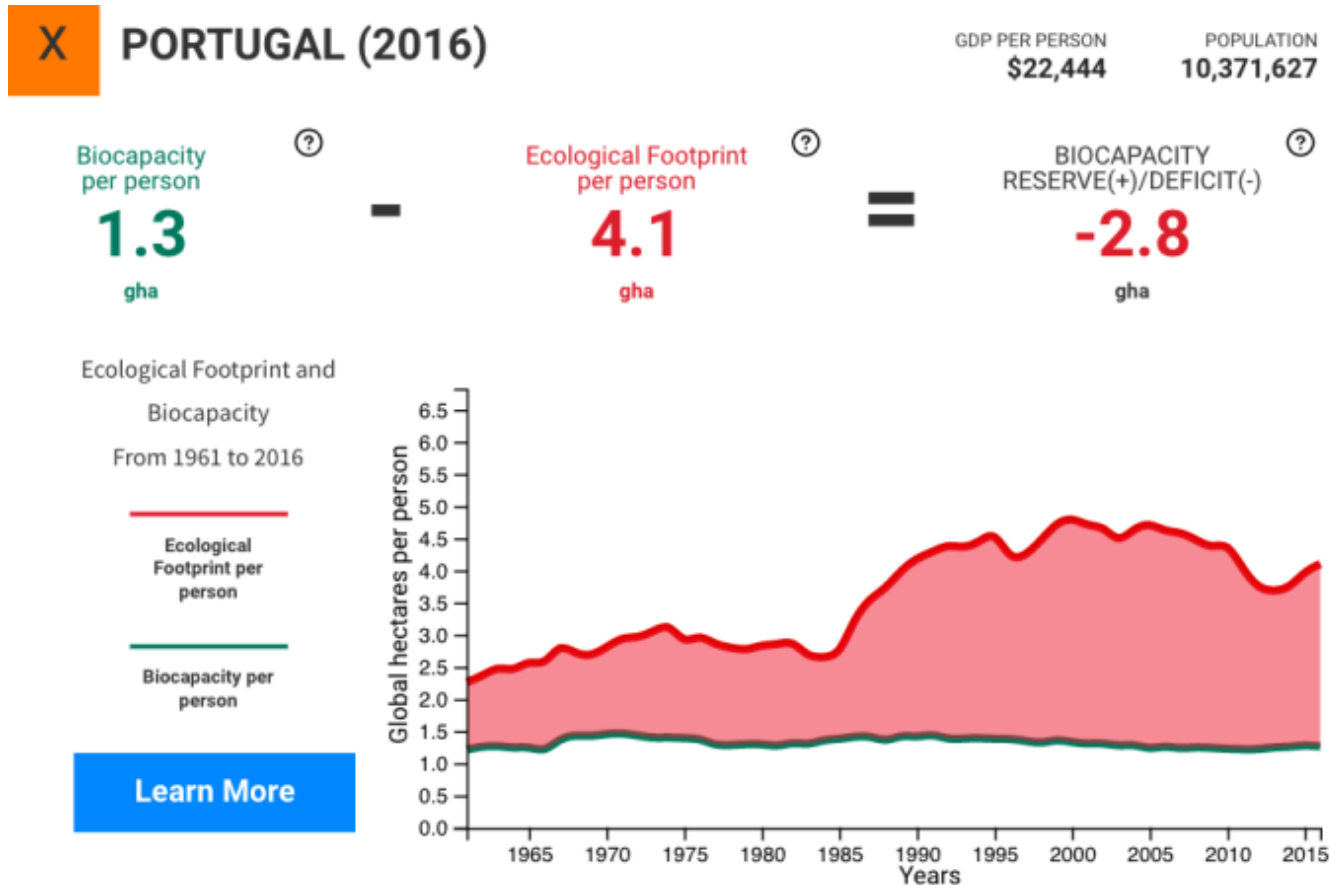


## BIOCAPACITY DEBTORS

FOOTPRINT GREATER THAN BIOCAPACITY



# Ecological Footprint



Data Sources: [National Footprint Accounts 2019 edition \(Data Year 2016\)](#); building on World Development Indicators, The World Bank (2019); U.N. Food and Agriculture Organization.

Global footprint network - <http://data.footprintnetwork.org/#/>

# Ecological Footprint and Carbon Footprint

The carbon footprint refers to the amount of carbon dioxide (CO<sup>2</sup>) emissions produced.

Book “How Bad Are Bananas?: The Carbon Footprint of Everything” by Mike Berners-Lee.



'Enjoyable, fun to read and scientifically robust.  
A triumph of popular science writing.'

Chris Goodall, author, *Ten Technologies to Fix Energy and Climate*



# There is no Planet B

If the global population reaches the expected 9.6 billion by 2050, it will take nearly 3 Earth planets to provide the natural resources needed to sustain current lifestyles. - **United Nations**



*Our planet is in danger*



*There is no Planet B*

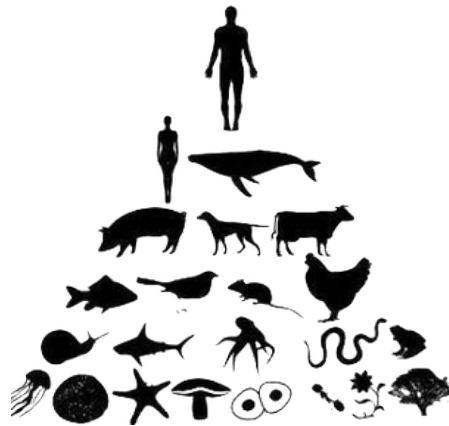


*And there are not 3 Planets*

# Anthropocentrism



“Human beings are superior to all other creatures.  
Nature was created for humanity to use and explore”  
- “The Ecology Book”



**EGO**



**ECO**

# There is no Planet B

Something to think about!

The Earth is 4.6 billion years old. Let's scale that to 46 years.

We have been here 4 hours. Our industrial Revolution began 1 minute ago.

In that time, we have destroyed more than 50% of the world's forests.

**This isn't sustainable!**



# Linear Economy

Extraction → Manufacturing → Transport → Consumption → “Trash”



“Throw it away”

**It does not exist!**



Climate Change

Carbon dioxide  
Methane  
Other GHG



Incineration





# Climate Change

What causes Global Warming - <https://climate.nasa.gov/causes/>

## The Greenhouse Effect



# Climate Change

What is the impact of climate change?

[Simulator of the impacts of climate change and how is it all interconnected?](#)

⏪ 🏠 > Show Overview

Causes

Mechanisms

Diseases

Populations



CO2



Crop Yield



Allergy



High Temp



Wildfire



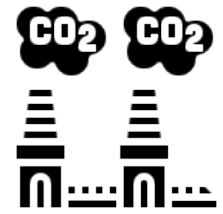
Nutritional

# Climate Change



- **Explanatory video of climate change as a Tetris Game**

<https://www.youtube.com/watch?v=ztWHqUFJRTs&t=1s>



- **Climate change with Bill Nye**

<https://www.youtube.com/watch?v=e0u-mespWnQ>

- **Our planet, our future - Fighting climate change together (in English and other languages)**

<https://op.europa.eu/en/publication-detail/-/publication/6af369ed-6221-11e8-ab9c-01aa75ed71a1/language-en>



- **Bringing Climate Topics into your Classroom**

<https://cleanet.org/clean/literacy/climate/index.html>

- **Facts and myths about climate change, WWF**

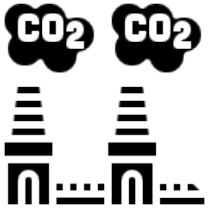
<https://www.wwf.org.uk/updates/10-myths-about-climate-change>



# Climate Change



- Lesson Plans: [Air](#) | [Climate Change](#) | [Ecosystems](#) | [Energy](#) | [Health](#) | [Waste](#) | [Water](#)
- <https://www.epa.gov/students/lesson-plans-teacher-guides-and-online-environmental-resources-educators>



- Environmental literacy teacher guides
- <https://www.nationalgeographic.org/education/programs/environmental-literacy-guides/>



# Everything is Transformed



“In Nature nothing is lost,  
nothing is created, everything is transformed”  
- Antoine Lavoisier

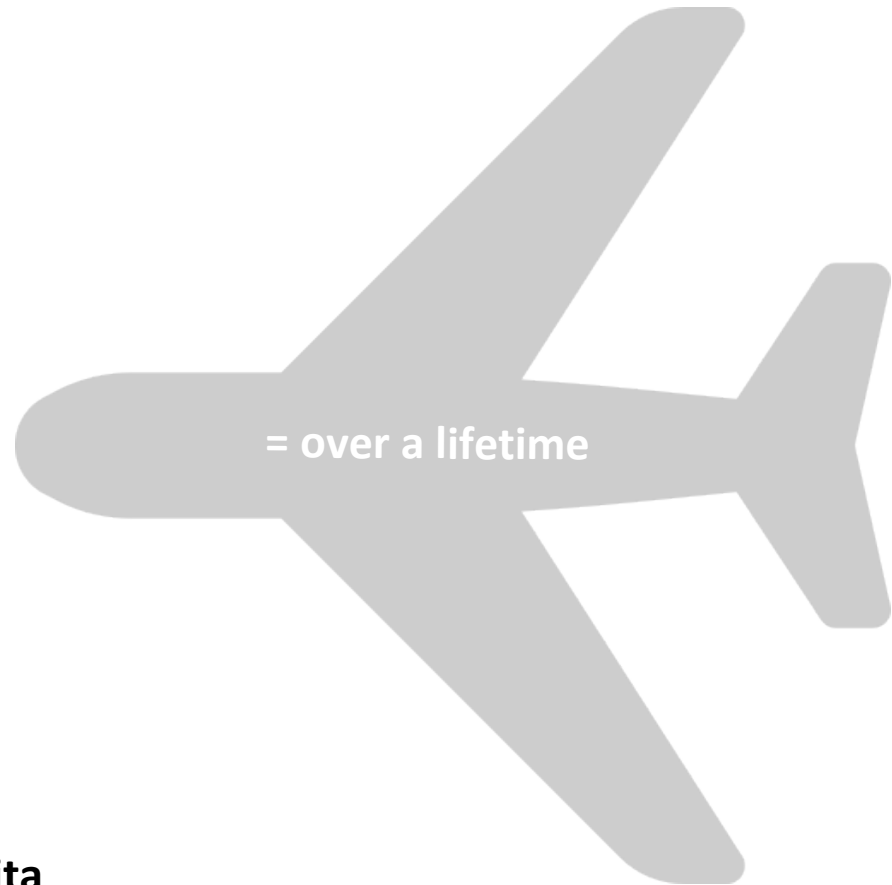


# Waste Produced

- **502 kg of municipal waste per capita were generated in the EU in 2019** - equivalent to the weight of an airplane over a lifetime;



**502 kg of municipal waste per capita**



# Waste Produced

**Municipal waste generated, 2005 and 2019**



Note: Countries are ranked in increasing order by municipal waste generation in 2019.

EU-27 estimated.

Bulgaria, Ireland, United Kingdom - 2018 data; Iceland - 2017 data.

Source: Eurostat (online data code: env\_wasmun)

# Linear Economy vs Circular

## Reduction

Extraction → Manufacturing → Transport → Consumption → “Trash”  
“Throw it away”



Recycle



Circular  
Economy

Share



Reuse



Repair





# Circular Economy – resources

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“The story of stuff” <https://storyofstuff.org/movies/>

Circular Classroom <https://circularclassroom.com/>

Ellen Macarthur Foundation -  
<https://www.ellenmacarthurfoundation.org/circular-economy/concept>



# The R's of Sustainability



**Reduce**



**Reuse**



**Recycle**



**But We can do  
more 😊**

**For a more Sustainable Planet**

# Rethink

## Rethink - consumption habits and attitudes

Being here already means a lot 😊



### Some common habits that are dangerous for the Environment:

- Cigarette butts on the floor;
- Cotton Swabs flushed down the toilet;
- Are part of the objects most found in our beaches.



# Respect



“We must only demand that  
which each individual can give” - The little prince



“Be the **change** you wish to see in the world.”  
- **Mahatma Gandhi**



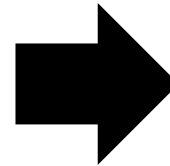
**Nature**



**Community**

in ecological transition

**Each person does what they can  
and each action counts!**



Do not impose, judge  
or criticize!  
Inform and inspire 😊

# The R's of Sustainability

Refuse what you  
don't need



Refuse

Reduce what you  
need



Reduce

Reuse what  
you consume



Reuse

Recycle what you cannot  
refuse, reduce or reuse



Recycle

and compost everything else."

Rot



**Bea Johnson**  
Zero Waste Movement  
Book "Zero Waste Home"



# The R's of Sustainability



## **Refuse**

what is not  
essential and has  
an environmental  
impact

## **Reduce**

consumption  
(of Resources)  
and the waste;

## **Reuse**

(Or repair)  
everything  
that is  
possible

## **Recycle**

what is no  
longer useful

## **Rot**

(composting),  
a natural way  
of recycle

**Towards a More Sustainable Planet**

**Each person does what they can. Every action counts!**

# Methodology

**Failed methodology**, frequent in the media – based on terror and without providing practical solutions;

**Successful methodology** we should apply – based on practical solutions, less theory and more action. Not to impose but to inform.



[Why humans are so bad at thinking about climate change](#)

# Reinform



**All together fighting for a common house!  
Our home, our future!**



# The Teachers Key Role

“Young people are the future of our planet. We must equip them with the information, insight and practical skills to understand the importance of biodiversity - both intrinsically and for the survival of humanity. Educators have a key role to play in preparing young people for the challenges that lie ahead. **There can be no greater legacy than giving young people the tools they need to save our planet.**”

- Sir David Attenborough



## Documentaries:

- Blue Planet II
- Our Planet
- Planet Earth



# There is no Planet B

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"We don't inherit the Earth from our parents, we borrow it from our children."

- Lakota



"Not only leave a better planet for my children, but better children for the planet."

- Ecologic Poem

# There is no Planet B

“No one will protect what **they** don't care about; and no one will care about what they have never experienced.” People are the key to nature's recovery. We need nature yet we are increasingly disconnected from our natural environment.

- David Attenborough

“**In the end**, we will conserve only what we love; we will love only what we understand and we will understand only what we are taught”

- Baba Dioum

“The world changes with your example, not your opinion.”

- Paulo Coelho



# Revolutionize



You don't even  
need to scream



## Respect

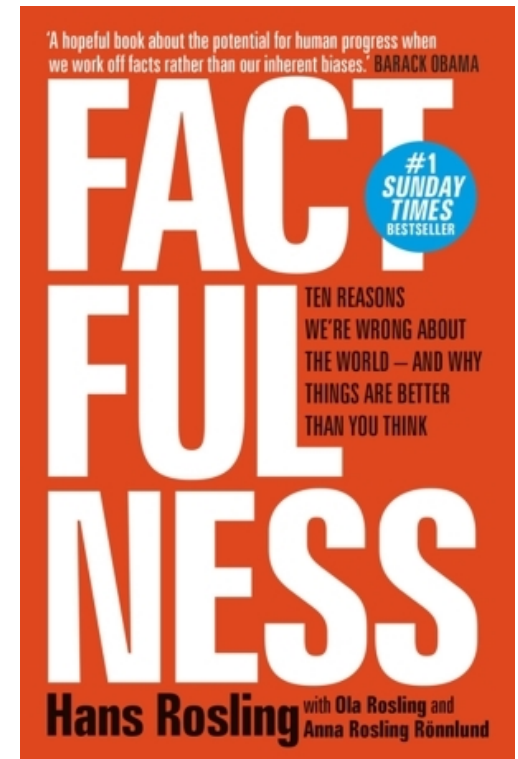
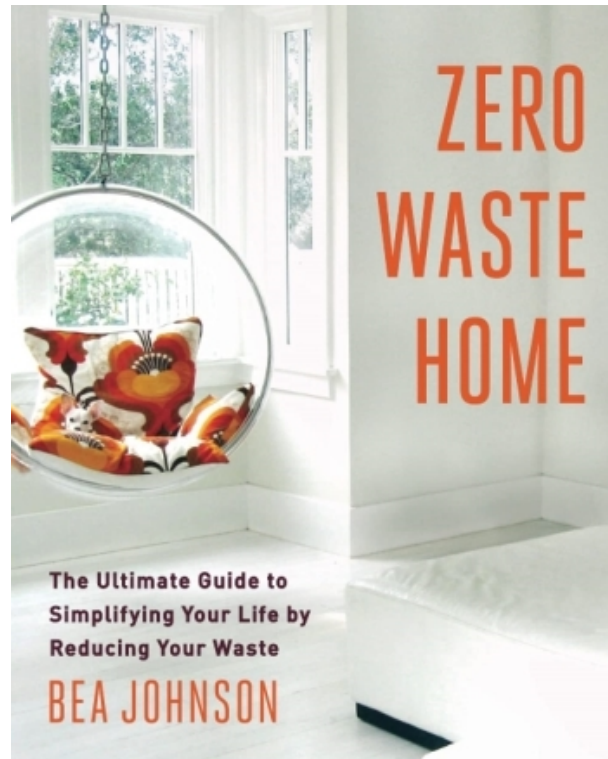
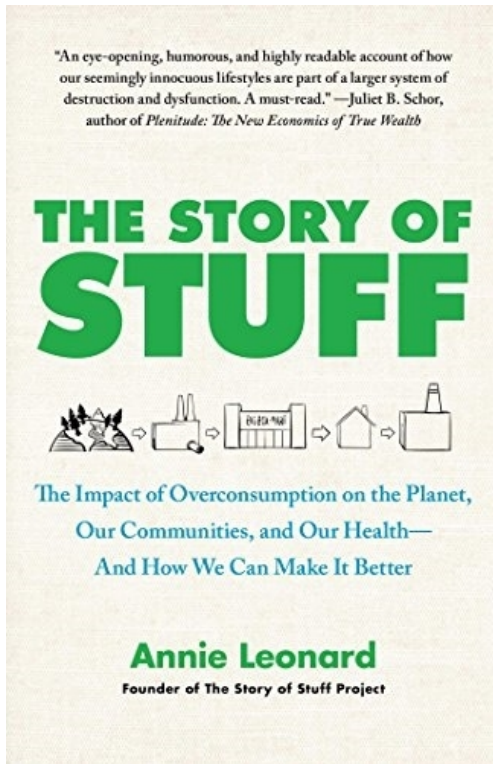
Let's fight for a better planet, always setting an example  
and inspiring others to do better too.



For your voice  
to be heard!

Ask companies and competent authorities to improve environmental practices and policies in favor of a more sustainable Planet. Don't forget the 1st R – Respect, make constructive criticisms with a problem-solution approach.

# Books Recommendation



# The R's of Sustainability



## **Refuse**

what is not  
essential and has  
an environmental  
impact

## **Reduce**

## **Reuse**

## **Recycle**

## **Rot**

**Towards a More Sustainable Planet**



# How much trash we produce?



# Refuse

We must learn to say "no thank you", always with kindness 😊

Printed invoices → by email

Publicity in the mailbox  
→ put sticker saying  
"No please"

Business cards  
→ take photo

"If it's free I'll take it"  
Gifts and samples  
that you don't  
consider essential

Single-use plastic  
and all types of  
disposable materials

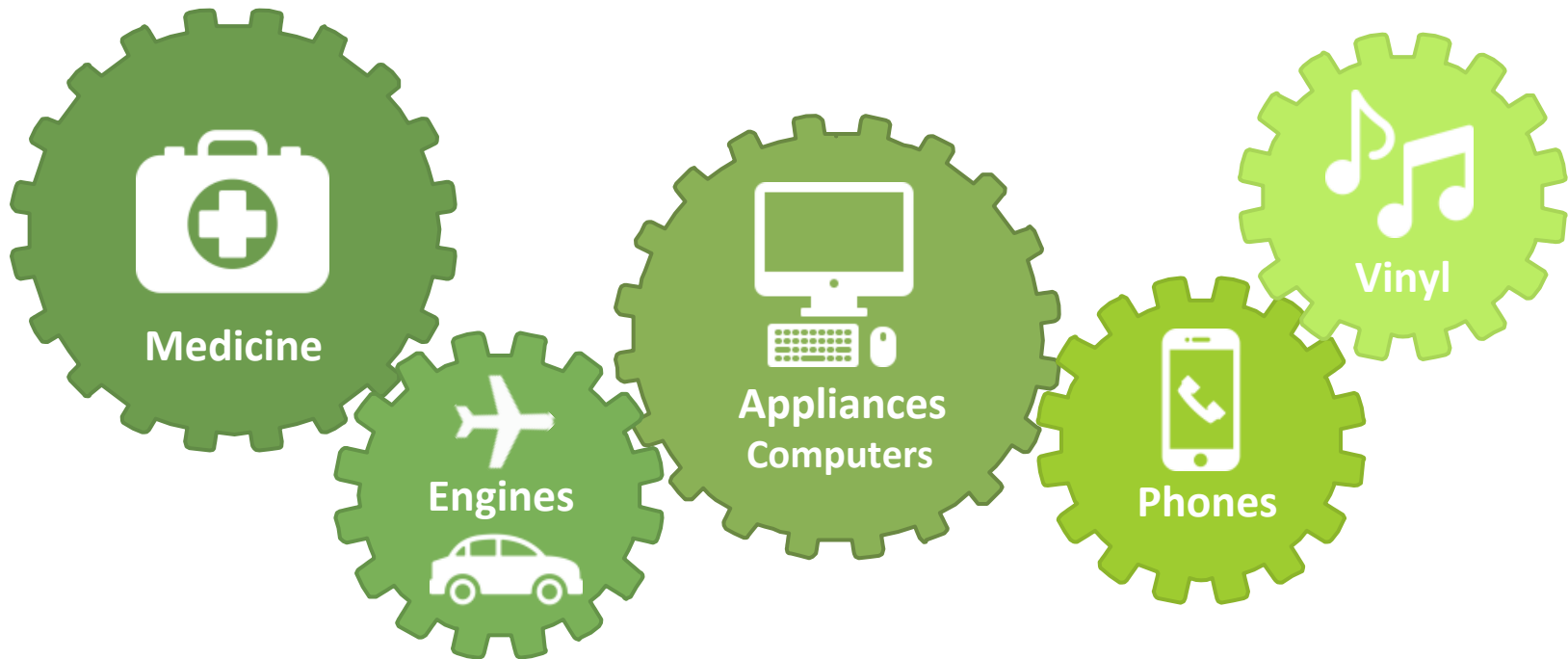




# Life in Plastic, it's Fantastic ?

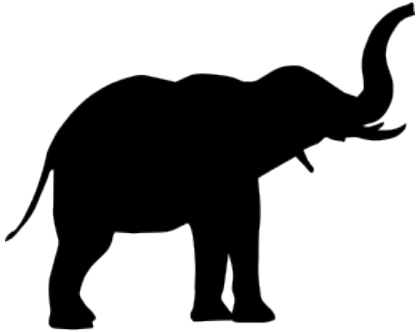
Plastic is not our biggest enemy. The real problem is how quickly we consume and dispose of such a durable material that crosses space and time.

**Plastic allowed great advances:**



lighter components = savings on fossil fuels

# History of Plastic

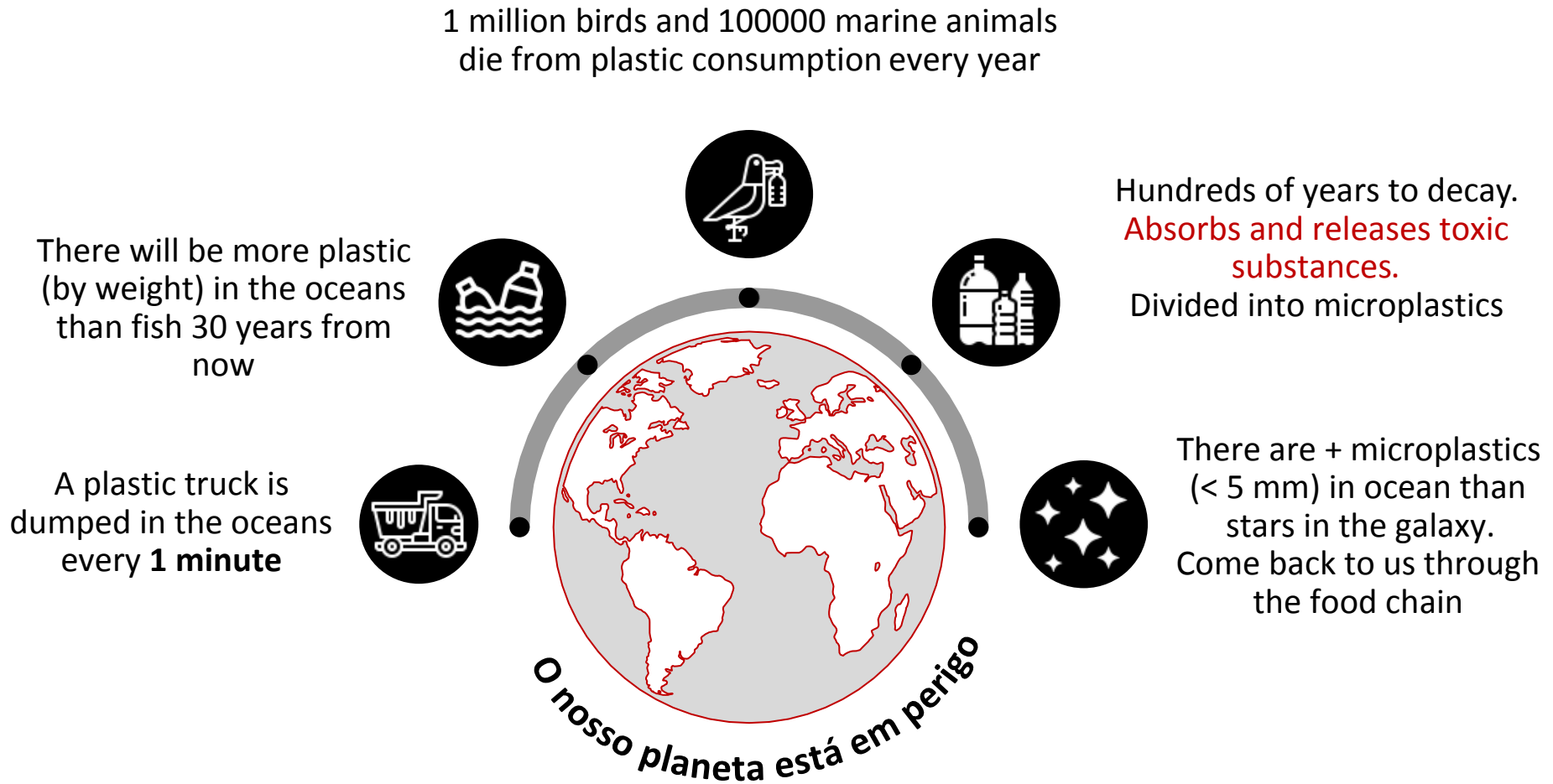


Plastic emerged for a noble cause, replacing materials of animal origin in personal and decorative utensils.



The first plastic bag was invented to save the planet, not destroy it! Since they were made of a strong material, unlike paper bags, in theory they could be used over and over again. However, the story took a different direction, the disposable...

# The Plastic Problem



# Plasticus Maritimus: An Invasive Species

## A EXPRESSÃO CADEIA ALIMENTAR DIZ-TE ALGUMA COISA?

Na cadeia alimentar dos oceanos, os organismos mais pequenos são comidos pelos maiores: tudo começa no fitoplâncton, o nome dado às tais plantas microscópicas que flutuam nos oceanos.

(1) O fitoplâncton é a base da cadeia alimentar e serve de alimento a muitos outros animais.

(2) A seguir, está o zooplâncton, os animais de pequeníssimas dimensões (como larvas de peixe ou crustáceos minúsculos) que servem de alimento a peixes de pequena dimensão.

(3) Depois vêm os peixes médios, os gigantes...

E também nós, os humanos. Sabemos que algumas algas do fitoplâncton aderem aos microplásticos que existem no mar. Ora, se o fitoplâncton é a base da cadeia alimentar, já estás a adivinhar o que vai acontecer a seguir: todos os animais que se alimentam de fitoplâncton vão comer plástico; e todos os animais que se alimentam de animais que se alimentam de fitoplâncton vão comer plástico também!

**Conclusão:** para o planeta estar saudável, o fitoplâncton dos oceanos tem também de estar saudável, pois é nele que tem início o ciclo de nutrientes que alimentará uma enorme quantidade de seres vivos da Terra.

Book "*Plasticus maritimus*, an Invasive Species"

# Plastic Islands



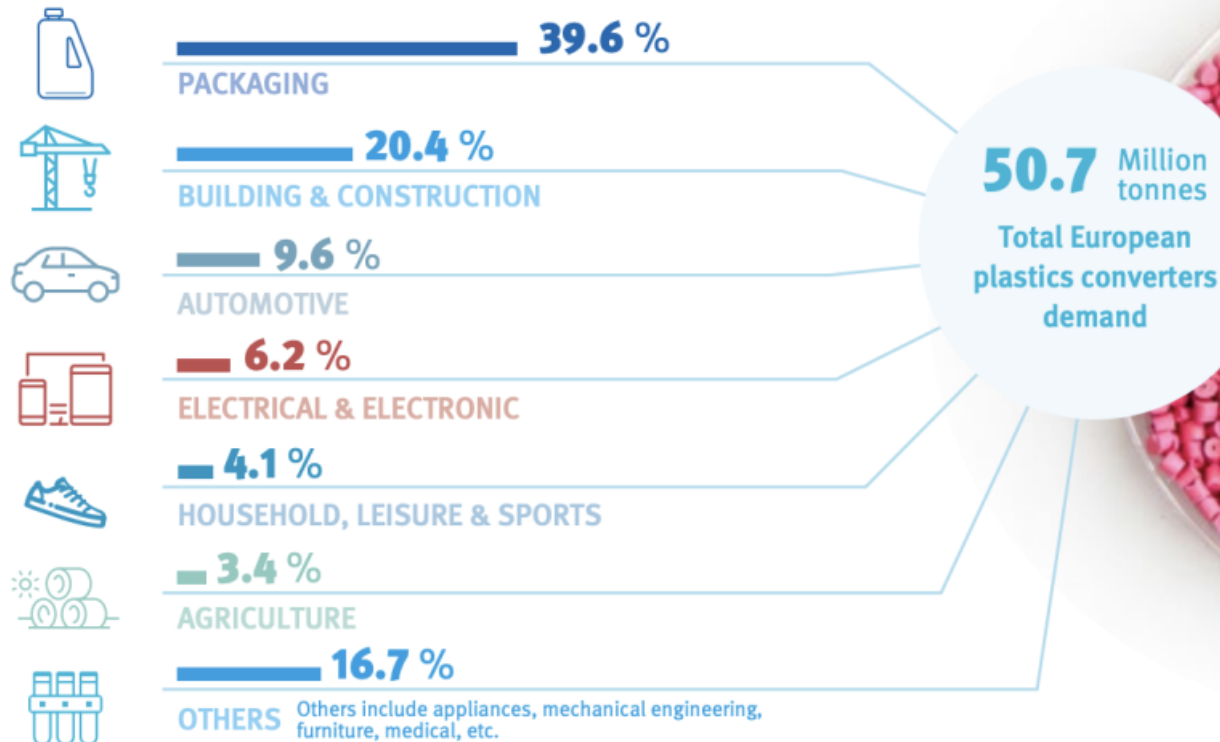


# Where do we use so much Plastic?

## PLASTICS DEMAND BY SEGMENT 2019

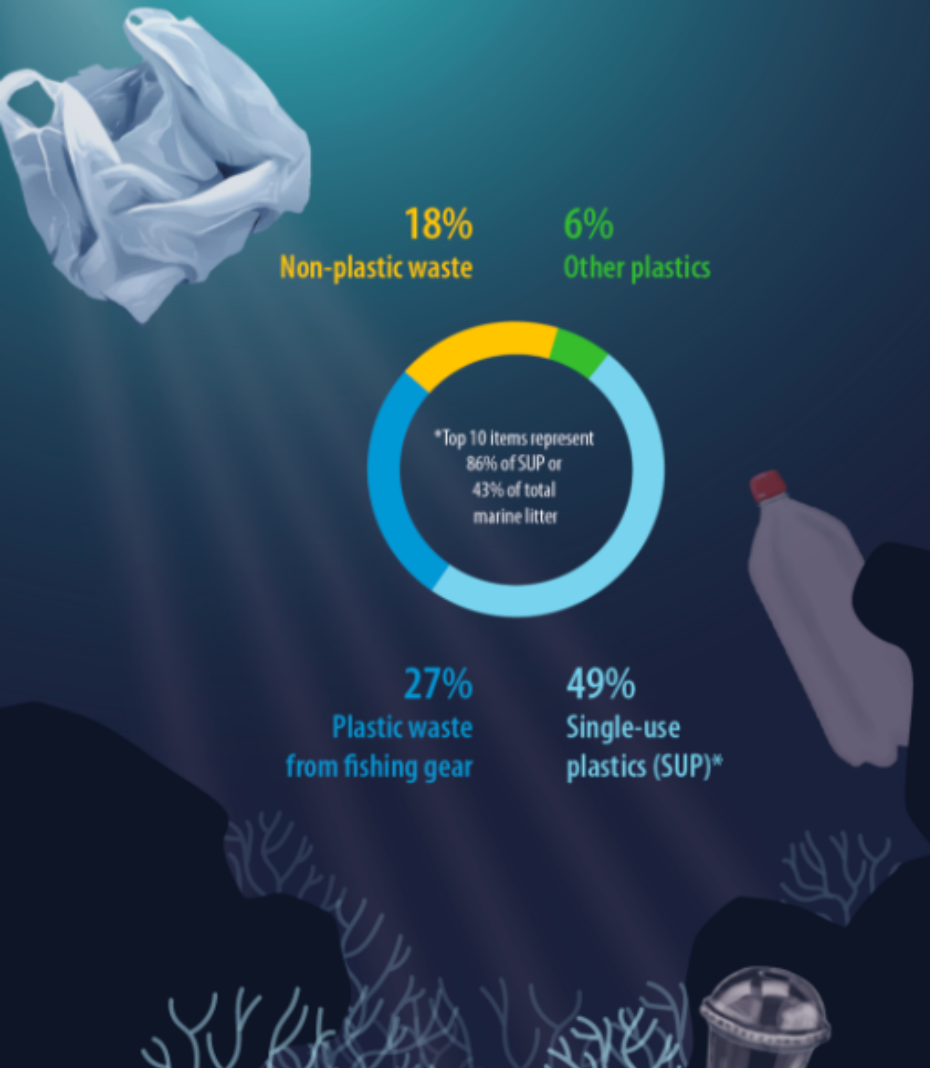
Distribution of European (EU28+NO/CH) plastics converters demand by segment in 2019. Packaging and building & construction by far represent the largest end-use markets. The third biggest end-use market is the automotive industry.

SOURCE: PlasticsEurope  
Market Research Group  
(PEMRG) and Conversio  
Market & Strategy GmbH



# Where does so much litter come from?

## MARINE LITTER BY TYPE



## TOP 10 SINGLE-USE PLASTIC ITEMS FOUND ON SEA SHORES

- 1 Drink bottles, caps and lids
- 2 Cigarette butts
- 3 **Cotton buds sticks**
- 4 Crisp packets/sweet wrappers
- 5 Sanitary applications (sanitary towels, tampons etc.)
- 6 Plastic bags
- 7 **Cutlery, straws and stirrers**
- 8 Drinks cups and cup lids
- 9 Balloons and **balloon sticks**
- 10 Food containers, including fast food packaging

Items in **yellow** could soon be banned as non-plastic alternatives are now available.



# Plasticus Maritimus: An Invasive Species

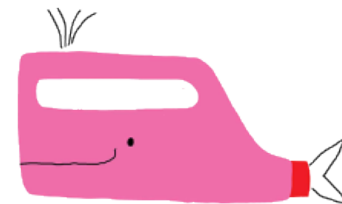


## Book Recommendation

### ***Plasticus maritimus: Na Invasive Species***

- Ana Pêgo (Marine biologist).

“*Plasticus maritimus* is the "scientific name" of an "exotic marine species" that has proliferated in all the oceans and beaches of the world. It is an "invasive species", well adapted to all environments, which represents a great threat to native biological communities and, consequently, to Man.”



PLASTICUS MARITIMUS

Logótipo do projeto  
Plasticus maritimus



# Challenge – Seeds of Change

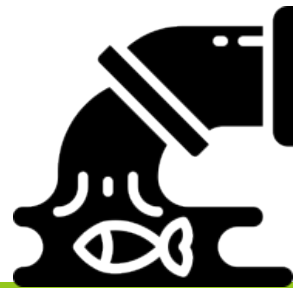
- ☐ Collect garbage in nature (or any place else);



# The Butt Hike



A project created by the German Andreas, also known as The Trash Traveler. With a community of 600 people and 70 initiatives, they collected 1.1 million cigarette butts in 2 months along the Portuguese coast.





# The Butt Hike





# The Plastic Hike

In 2020, The Trash Traveler traveled the Portuguese coast in 58 days to raise awareness about plastic pollution. 1.6 tons of plastic were collected. It's not just about cleaning but a movement to raise awareness. It resulted in a documentary (from Camera With No Name) and several pieces of art were developed with the collected plastic.

## THE PLASTIC HIKE DOCUMENTARY

### THE PLASTIC HIKE

A JOURNEY OF AWARENESS  
THE DOCUMENTARY



# Autonomous Activity - Seeds of Change

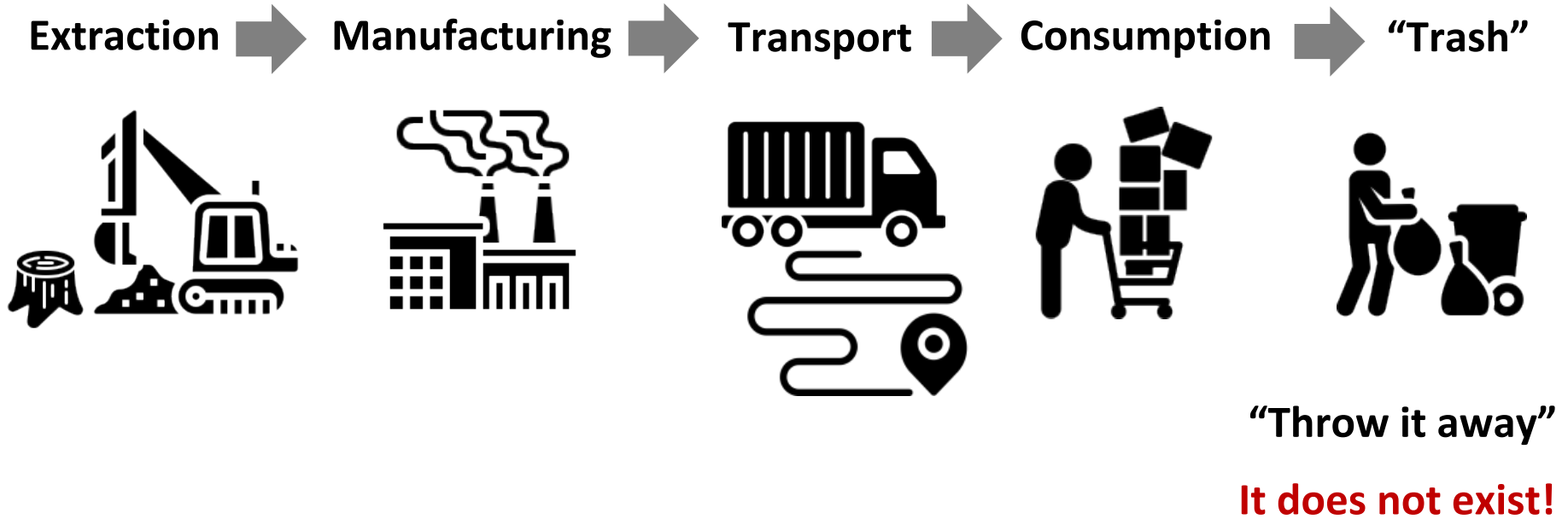
- ☐ Leave the place better than you found it 😊

During the afternoon you should do a small action and spread seeds of change to leave the place better than you found it!

- Take a photo “Before” and “After” the small action with big impact!
- What can we do to prevent the problem identified in “before”?
- Share it in the WhatsApp Group 😊
- Let’s spread seeds of change!



# Disposable Society



Half of the plastic manufactured to date was generated in the last 15 years;

**406 million tons of plastic are produced per year;**

**40% of the plastic is used only once and then thrown away.**

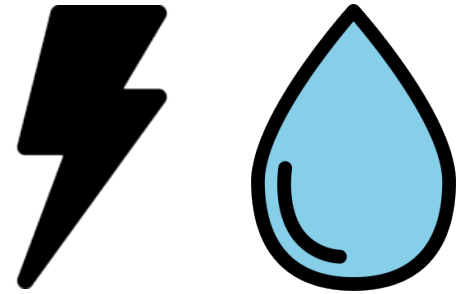
# Is recycling the solution?

“We can have an idea that a plastic package placed in the recycling bin will transform, as if by magic, into a new plastic package, without any environmental cost. But that's not quite the case: recycling is not melting plastic out of a package and making a new package out of it. First, recycling always involves the consumption of some water and energy; second, plastic is not recyclable to infinity, as it loses properties each time it is recycled.”

- Plasticus maritimus, Ana Pêgo



Magic?

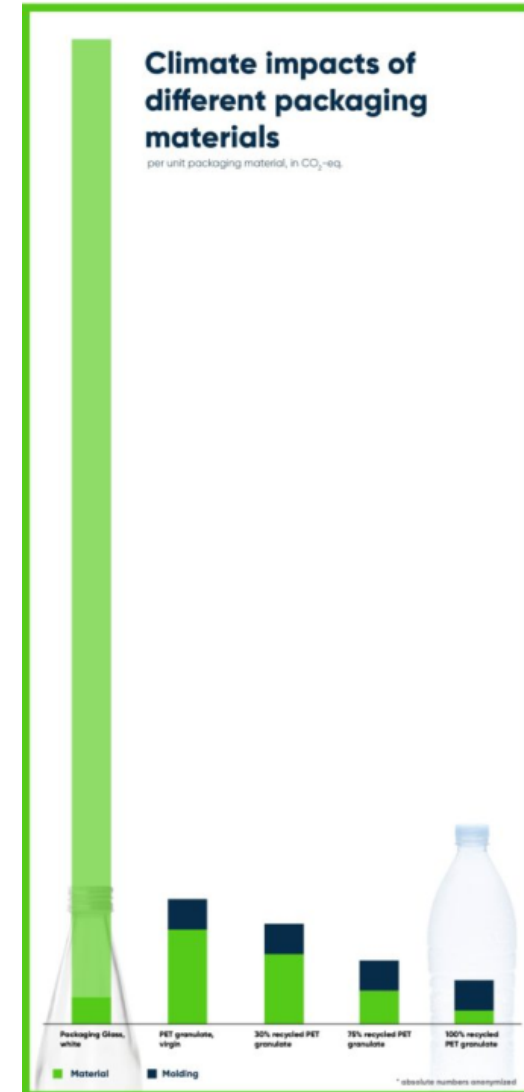
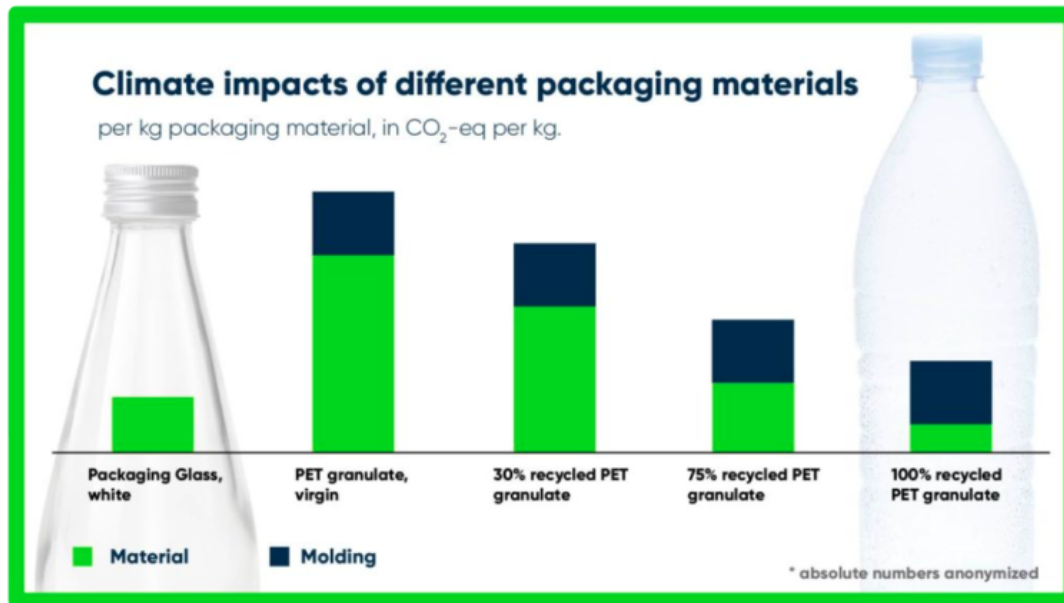


Consumption of energy and water

# Is replacing plastic the solution?

**Plastic vs Glass** - considering recycling rates, initially we can conclude that glass has less impact but glass packaging can weigh up to 40x more than plastic packaging → impact on transport and consequent emissions.

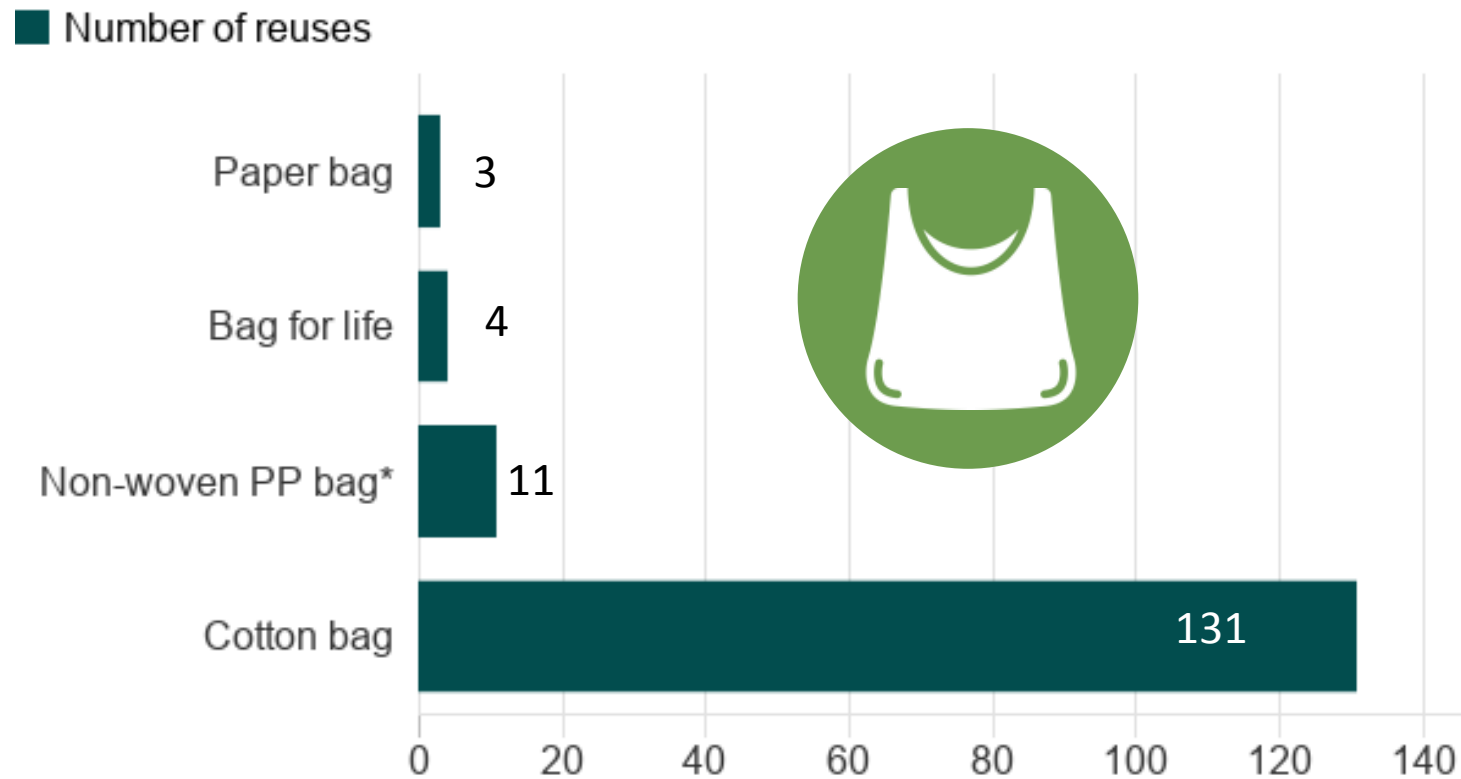
Taking into account CO<sub>2</sub> equivalent for global warming





# Is replacing plastic the solution?

How many times is it necessary to reuse each type of bag to make it more environmentally sustainable than a plastic bag?



Source: Environment Agency (\* Non-woven PP is described as a heavier more durable bag made from polypropylene ) **BBC**

# Is replacing plastic the solution?

How many times is it necessary to reuse each type of bag to make it more environmentally sustainable than a plastic bag?

Type of carrier	HDPE bag (No secondary reuse)	HDPE bag (40.3% reused as bin liners)	HDPE bag (100% reused as bin liners)	HDPE bag (Used 3 times)
Paper bag	3	4	7	9
LDPE bag	4	5	9	12
Non-woven PP bag	11	14	26	33
Cotton bag	131	173	327	393

If we reuse the plastic bag for “the garbage can” these values are even higher!

But it's also important to consider the impact if you end up in nature !

If forests are managed in a sustainable way, with correct FSC or PEFC certification, it is a positive factor for paper bags.

# Refuse Disposables → Reuse

Replace with reusables - Next R (Reuse)



# Refuse Disposables

## What is the path of a plastic bottle?

1 million bottles sold every minute  
91 % are not recycled (Source: [Forbes](#))



**Water bottles**  
→ reusable



**Plastic bags** →  
reusables

± time of use: 15 min



**Bottled water**  
→ tap /  
filtered water



# Refuse Disposables

Balloons  
→ refuse



Throw Cigarette  
butts on the floor  
→ fixed/portable  
ashtray



Confetti

→ with leaves and a  
punch



Cultivating Futures

# Refuse Disposables

Products unnecessarily wrapped in plastic

Vegetables and Fruits wrapped  
→ without packaging

Buy packaged  
→ in bulk  
<https://agranel.pt/>

Disposable bags  
→ reusable bags  
/containers

Individual  
packages  
→ big packages

Local shops  
or Markets  
(Organic)



# Refuse Disposables



**Tea**  
→ loose leaves



**Coffee**  
→ reusable capsules

**Tea**  
→ loose leaves;



**Coffee**  
→ without capsules



# Refuse Disposables





# Waxed Cloth - We will Need...

**Thin fabric (cotton)**



**Beeswax / Soy**



**Scissors**



**Iron**



**Parchment paper / vegetable parchment**



# Waxed cloth - How to make?

**Cut the thin fabric (cotton) to the desired size**



# Waxed cloth - How to make?

Place the cloth on a sheet of parchment paper.  
Cover the cloth with wax (or grate a natural wax candle)



# Waxed cloth - How to make?

Cover with another sheet of parchment paper.



# Waxed cloth - How to make?

“Iron it”



# Waxed cloth - How to make?

After letting it dry, it's ready to use :)





# Waxed cloth - How to make?

---

After letting it dry, it's ready to use :)



# Waxed cloth - How to make?

---

After letting it dry, it's ready to use :)





# Waxed cloth - How to make?

---

After letting it dry, it's ready to use :)



**Other options:** They can also be placed in the oven for the wax to melt and spread it with a brush;

# Ecological Utensils



Plastic dish brush  
→ brush with  
replaceable head

Plastic dish brush  
→ compostable  
brush



Plastic Brush  
→ natural fiber brush



Scourers  
→ recyclable copper



# Ecological Utensils



Plastic dish brush  
→ coconut fiber



Plastic dish brush  
→ compostable at home

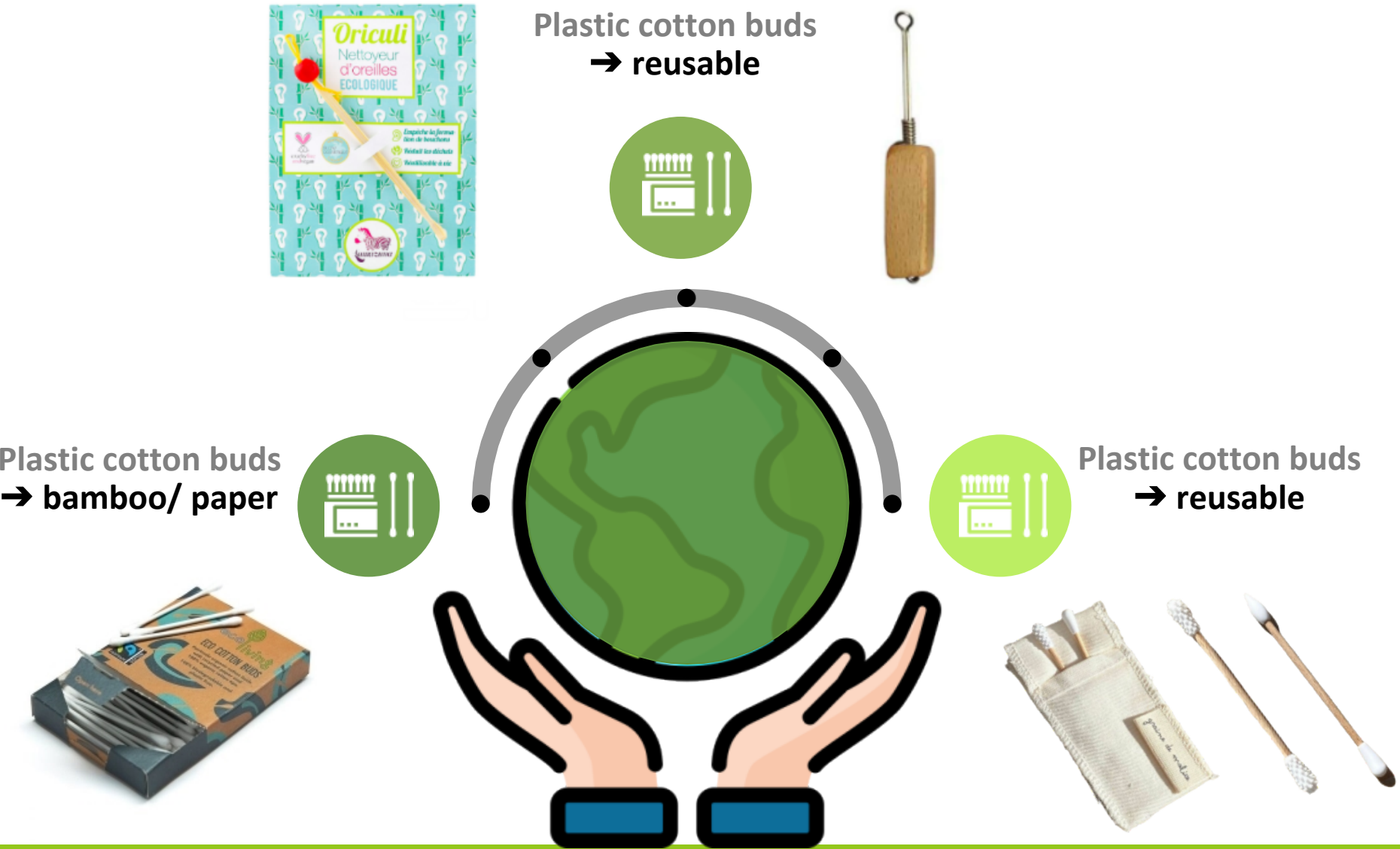
Plastic dish brush  
→ Luffa



Plastic dish brush  
→ compostable at home



# Bathroom



# Bathroom



Toothpaste  
→ reusable / recyclable  
/ bulk packaging



Toothbrush → bamboo or  
replaceable head

Razor →  
reusable

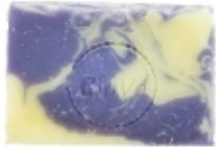


Make-up remover pads  
→ reusable ([fabric](#) or  
[crochet](#))



# Bathroom

Hygiene and cleaning products  
→ solid or in bulk



Shower gel  
→ solid or in bulk



Shampoo and  
conditioner  
→ solid or in bulk



Deodorant



Detergents



# Menstrual Products

In 2017, in Europe, around 49 billion disposable menstrual products were used, generating 590,000 tons of waste.

Considering that 1 year produces, on average, 5.3 Kg of CO<sub>2</sub>eq. The annual average of 46 billion menstrual products in Europe is equivalent to 245,000 tons of CO<sub>2</sub>eq.

- Rezero



Source: [Rezero](#)



# Menstrual Products



Tampons and pads  
→ reusable pads



Tampons  
→ Menstrual Cup



Tampons and pads  
→ menstrual underwear



## Menstrual Cup

- Impact

0.04 kg of CO<sub>2</sub>eq for 1 year  
vs  
5.26 kg of CO<sub>2</sub>eq (tampons);

We can save 26.1 kg of CO<sub>2</sub>eq every 5 years;

- Cost

Save between 18€ to 119€ per year. Savings can reach 4400€ in a lifetime.



# Disposable Diapers and Wipes

In 2017, in Europe, around:

- 33 billion disposable diapers, resulting in 673,100 tons of garbage;
- 68 billion disposable wipes, equivalent to 511,000 tons of garbage;

Can represent a savings of €200 to €2000 per family

(This value increases if it is more than one child or purchased second hand).

[- Rezero](#)



**Landfill**



**Incineration**

# Disposable Diapers and Wipes

Disposable diapers  
→ reusable

[Portuguese article  
about reusable diapers](#)



Baby wipes  
→ reusable



# Creative Projects

**Bordalo II** - Nature portraits made with what destroys it the most.

He turns “trash” into art, making large animals installations across city walls with ecological and social messages, an alert to what we are doing to our planet!

<https://www.rtp.pt/play/p55/e359017/minuto-verde>

<https://www.youtube.com/watch?v=2hrli0PvbJg>





# Creative Projects

**Xico Gaivota** - transforms plastics and other materials from remote beaches into works of art.

Let's make Art with plastic we usually throw away or we find it in the garbage / nature ?

<https://www.xicogaivota.com/>

[https://www.youtube.com/watch?time\\_continue=1&v=Ou3vG7Dy3w8&feature=emb\\_logo](https://www.youtube.com/watch?time_continue=1&v=Ou3vG7Dy3w8&feature=emb_logo)



# Creative Projects

**Extraordinary garbage** - documentary that tells how the artist Vik Muniz found inspiration in the largest garbage dump in the world – the gramacho garden, in Rio de Janeiro.

[https://www.youtube.com/watch?v=\\_pyR9qCd2F8&](https://www.youtube.com/watch?v=_pyR9qCd2F8&)





## A large collection of colorful plastic toys and household items, including combs, brushes, and various figurines, arranged on a white surface. The items are organized into several groups: green items on the left, blue items in the middle-left, red items in the middle, yellow items in the middle-right, pink items on the right, and black items on the far right. The items include combs, brushes, figurines, and various household objects.

**Source:** Plasticus maritimus, <https://www.facebook.com/plasticusmaritimus/> 



# The sea starts here!



# Creative Projects



*'I've got 583 billion outside'*



# Plastic Free July

## What are you here for?

Plastic Free July is full of ideas – click here to reveal the options that suit you



**Getting started**

[Learn more >](#)



**Next steps**

[Learn more >](#)



**At work**

[Learn more >](#)



**At school**

[Learn more >](#)



**At events**

[Learn more >](#)



**For business**

[Learn more >](#)



**My community**

[Learn more >](#)



**Local government**

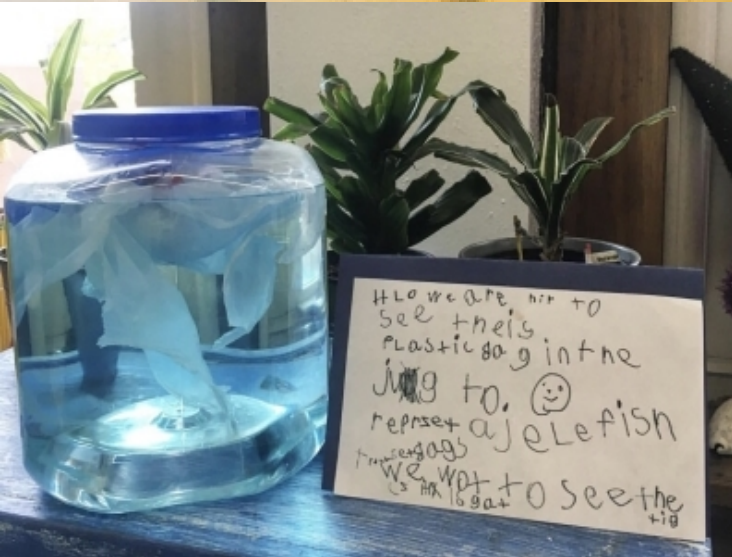
[Learn more >](#)

Plastic Free July - <https://www.plasticfreejuly.org/>

# Educational Activities



**Can we make Art with plastic that we usually throw away or find in a cleanup?**



**Let's explain why animals eat plastic?**

To a turtle, a plastic bag looks like a jellyfish, its food.

Source: [schools.stopwaste.org](http://schools.stopwaste.org), @Zerowasteclassroom

# Educational Activities



**Can we identify what is good or bad for the Earth?**

Choose some impactful data and let your students' imagination run wild by making creative posters to share this information with the rest of the educational community.

Also mention what people can do to change the situation. We don't just want to talk about the problems that exist, we want to share solutions and inspire a more sustainable future 😊

**Source:** <https://alunoon.com.br/infantil/>

# Educational Activities

In a math class, students counted the number of disposable plastics they had in their lunch boxes. Teachers demonstrated ways to reduce this plastic.

They counted again a few months later and found a 26% reduction in disposable plastics across the school.

**Source:** Plastic Free July

<https://www.plasticfreejuly.org/get-involved/what-you-can-do/for-teachers/>

## 9 WAYS TO REDUCE PLASTIC IN YOUR SCHOOL



1 Hold an educational film screening or talk



2 Organise school, park, river and beach cleans



3 Stop selling plastic bottles, encourage reusables instead



4 Encourage less plastic in packed lunches



5 Choose reusables for the canteen and school events



6 Request that supplier deliveries are plastic-free



7 Rethink catering options to eliminate single-use plastic



8 Ditch the laminator, choose plastic-free displays



9 Share your successes, to inspire other schools too

#LessPlastic



IN COLLABORATION WITH



WWW.LESSPLASTIC.ORG.UK

# Educational Activities

MARLISCO the educational material “Know Feel Act! To Stop Marine Litter”

<https://www.marlisco.eu/education.en.html>

“Plastic Pollution curriculum and Activity Guide”

<https://seagrant.psu.edu/section/curriculum>

Waste-free activity ideas for schools <https://www.ukonserve.com/Articles.asp?ID=251>

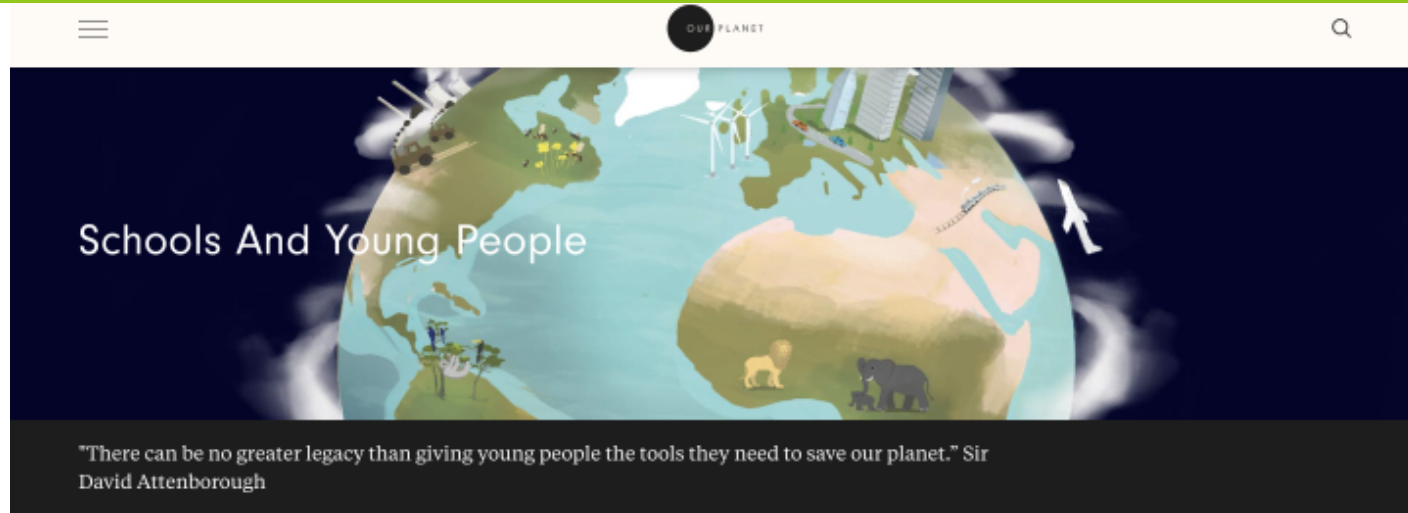
"Doing the 4Rs A Classroom Activity Guide to Teach Reduce, Reuse, Recycle and Rot"

(Ingês) - <http://www.stopwaste.org/resource/doing-4rs-classroom-activity-guide-teach-reduce-reuse-recycle-and-rot>





# Resources For Schools And Young People



## Resources For Schools And Young People



### Our Planet, Their Future

A guide for educators, youth workers and parents.



### Classroom Resources

Free Primary and Secondary WWF resources for your region.

# Resources For Schools And Young People



## Youth Voices for Our Planet

Inspiring perspectives from young global changemakers.



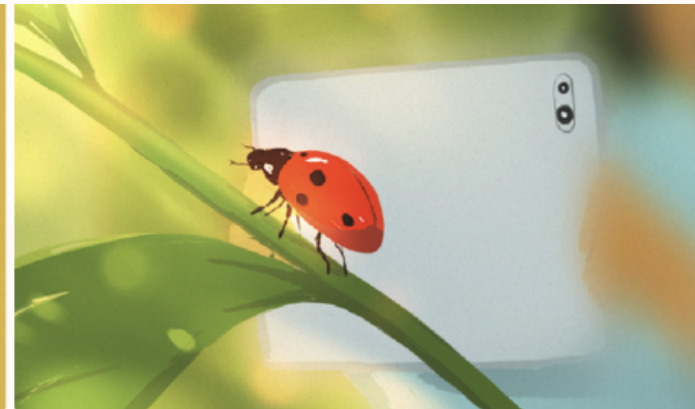
## Wild Wisdom Quiz

Exploring Our Planet - India's only national-level wildlife quiz goes global.



## Our Planet Live

Connect live to experts and classrooms worldwide via Skype in the Classroom.



## Seek for Our Planet

Discover nature all around with our free wildlife ID app created by iNaturalist.



# Resources For Schools And Young People



**A Toolkit for Local Action on Biodiversity**



**Educational Screening Pack**



**Our Planet Children's Book**

The official children's companion to the series, written by Matt Whyman and WWF, with a foreword by David Attenborough and illustrations by Richard Jones.



**Children's Book Resource Pack**

Printable worksheets and visual resources for schools and families.

# Documentaries

A plastic Ocean

[https://www.youtube.com/watch?v=yG-2HZNtdR8&feature=emb\\_title](https://www.youtube.com/watch?v=yG-2HZNtdR8&feature=emb_title)

The story of plastic <https://www.storyofplastic.org/>

Trashed - Where does our trash go

[https://www.youtube.com/watch?v=5z2s\\_klZkFg](https://www.youtube.com/watch?v=5z2s_klZkFg)



# Videos

“Sources and Impacts of Marine Litter”

<https://www.youtube.com/watch?v=017bBeXhYz4>

“What really happens to the plastic you throw away?”

[https://www.youtube.com/watch?v=\\_6xINyWPpB8](https://www.youtube.com/watch?v=_6xINyWPpB8)

“Plastic Pollution: How Humans are Turning the World to Plastic?”

<https://www.youtube.com/watch?v=RS7IzU2VJIQ&t=263s>

“Break-up with disposable Plastics”

<https://www.youtube.com/watch?v=ps5GcHkQNeQ>



# Books and Infographics

Infographics - <https://www.lessplastic.org.uk/infographics/>

Plastic Atlas Facts and figures about the world of synthetic polymers (free)  
[https://www.boell.de/en/2019/11/05/plasticatlas?dimension1=ds\\_plastic\\_atlas](https://www.boell.de/en/2019/11/05/plasticatlas?dimension1=ds_plastic_atlas)

[Activities Book - Plastic in the Ocean](#) (Jigajoga Edições) - (Portuguese and English)

Plasticus maritimus: An Invasive Species, Ana Pêgo



# Reports

SINGLE-USE PLASTICS A Roadmap for Sustainability – United Nations

[https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic\\_sustainability.pdf](https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf)

Our world in data plastic pollution - <https://ourworldindata.org/plastic-pollution>

“Single use plastics and the marine environment” - Seas At Risk

<https://seas-at-risk.org/17-marine-litter/801-how-to-cut-ocean-plastic-pollution-start-with-these-billions-of-bottles-straws-and-coffee-cups.html>

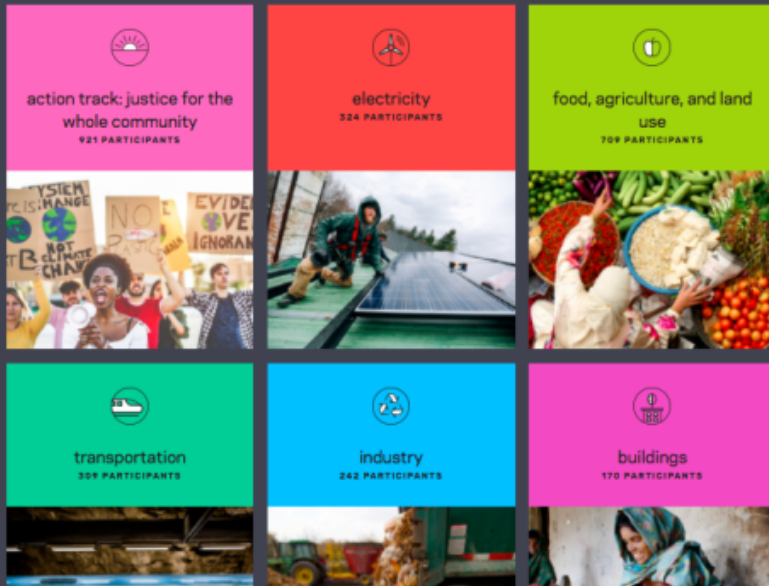


# Drawdown Ecochallenge

ecochallenge.org  
drawdown ecochallenge

TEAMS ▾ PARTICIPANTS ABOUT ▾ JOIN

## action categories



## food, agriculture, and land use

[BACK TO ALL ACTION CATEGORIES](#)

**ADDRESS WASTE AND DIETS. PROTECT ECOSYSTEMS. SHIFT AGRICULTURE PRACTICES.**

Human activity has transformed a significant fraction of the planet's land, especially for growing food and harvesting forests. Land is the common ground of shelter, sustenance, feed for animals, fiber, timber, and some sources of energy, as well as the direct source of livelihood for billions of people.

[SHOW ACTION FILTERS ▾](#)

### REDUCE ANIMAL PRODUCTS PLANT-RICH DIETS

I will enjoy (\_\_\_\_) meatless or vegan meal(s) each day of the challenge.

[LEARN MORE](#)

[JOIN TO SELECT](#)

DAILY ACTION



### SUPPORT LOCAL FOOD SYSTEMS PLANT-RICH DIETS

I will source (\_\_\_\_) percent of my food from local producers each day. This could include signing up for a local CSA, buying from a farmer's market, visiting a food co-op, foraging with a local group, or growing my own ingredients.

[LEARN MORE](#)

[JOIN TO SELECT](#)

DAILY ACTION



### KEEP TRACK OF WASTED FOOD REDUCED FOOD WASTE

I will keep a daily log of food I throw away during Drawdown Ecochallenge, either because it went bad before I ate it, I put too much on my plate, or it was scraps from food preparation.

[LEARN MORE](#)

[JOIN TO SELECT](#)

DAILY ACTION



### SMALLER PORTIONS REDUCED FOOD WASTE

I will use smaller plates and/or serve smaller portions when dishing out food.

[LEARN MORE](#)

[JOIN TO SELECT](#)

DAILY ACTION



# Act Now - United Nations

## Start with ten simple actions!

---

We can all live sustainably and help build a better world for everyone. But this means taking a look at how we live and understanding how our lifestyle choices impact the world around us. We make hundreds of thousands of decisions during the course of our lives. The choices we make and the lifestyles we live have a profound impact on our planet.



**5-Minute Showers**



**Bring Own Bag**



**Drive Less**



**Lights Off**



**Local Produce**



**Plant-based Meals**



**Recycle**



**Refill and Reuse**



**Unplug**



**Zero-Waste Fashion**



# Act Now - United Nations

## Mobile App



### Learn more, track your habits and see your impact

Make the shift to a more sustainable lifestyle. The mobile app by AWorld – because there is no planet B – allows you to choose and track a set of sustainable habits, and see the impact you are making in terms of CO2, water and electricity saved. You can also take educational journeys, engage in group challenges, get tips and take quizzes, all geared toward living more sustainably.

[DOWNLOAD FROM THE APP STORE!](#)

## Chat Bot



### Looking for just ten simple actions you can take every day?

Ask the ActNow chat bot on the bottom right corner of this page. The bot recommends daily actions to reduce our carbon footprints – like traveling more sustainably, saving energy or eating more plant-based meals. By logging your personal actions on the bot, you contribute to the global count above, adding to the power of collective action. The more people act, the bigger the impact. #ActNow.

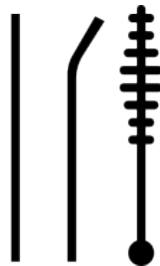
# Challenge – Seeds of Change

- ☐ Audit to our garbage can – what do we throw “away”?;
- ☐ Refuse - “Don’t need, thank you 😊 ” always with kindness;
- ☐ Stick a “No publicity here” sticker to your mailbox;
- ☐ Choose electronic bills;
- ☐ Take photos of business cards;
- ☐ Before buying, think “Do I really need this? Is there any way that I can get this product in a more sustainable way?”;
- ☐ Buy in bulk only the amount you need / with the least amount of packaging possible;
- ☐ Buy unpacked fresh products;
- ☐ Buy local, seasonal (and organic);
- ☐ Don’t throw cigarette butts on the floor and educate others about the importance of this gesture;



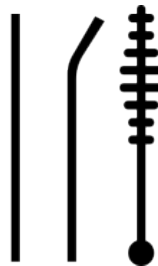
# Challenge – Seeds of Change

- ☐ Try to avoid disposables as much as possible;
- ☐ Choose reusable take-away packaging;
- ☐ Use reusable tableware;
- ☐ Refuse straws (or use reusable ones);
- ☐ Opt for reusable coffee cups;
- ☐ Use a reusable bottle;
- ☐ Filter the water instead of buying water bottles and jugs;



# Challenge – Seeds of Change

- ☐ Use big reusable bags when shopping;
- ☐ Use small reusable bags for products like fruits and vegetables;
- ☐ Replace cling wrap, aluminum foil and parchment paper with reusable alternatives;
- ☐ Swap plastic bags with reusable options to store food;
- ☐ Take snacks from home in reusable containers;
- ☐ Use reusable ice cube trays to make ice;
- ☐ Eat ice cream on cone and without a plastic spoon;
- ☐ Make tea with loose leaves;
- ☐ Make coffee without capsules (or use reusable capsules);



# Challenge – Seeds of Change

- ☐ Choose detergents in bulk / solid form / with ecological packages;
- ☐ Use reusable / compostable cleaning tools;
- ☐ Opt for reusable make-up removal pads;
- ☐ Use bamboo / card / reusable cotton swabs;
- ☐ Choose reusable feminine hygiene products;
- ☐ Swap hygiene products (shampoo, conditioner, shower gel, etc.) with solid option or in bulk/refill form;



# Challenge – Seeds of Change

- ☐ Use deodorant in eco-friendly containers;
- ☐ Prefer toothpaste in bulk / reusable containers;
- ☐ Choose a bamboo / with replaceable head toothbrush;
- ☐ Use compostable dental floss;
- ☐ Prefer natural exfoliants;
- ☐ Opt for an inox reusable razor;
- ☐ Choose reusable diapers and baby wipes;
- ☐ Take a travel kit with you, every time you travel;





# A Common Cause! Our planet!



“We may never reach Zero in “Zero Waste”,  
but that is no reason to take Zero action.”

- @zerowastechef

