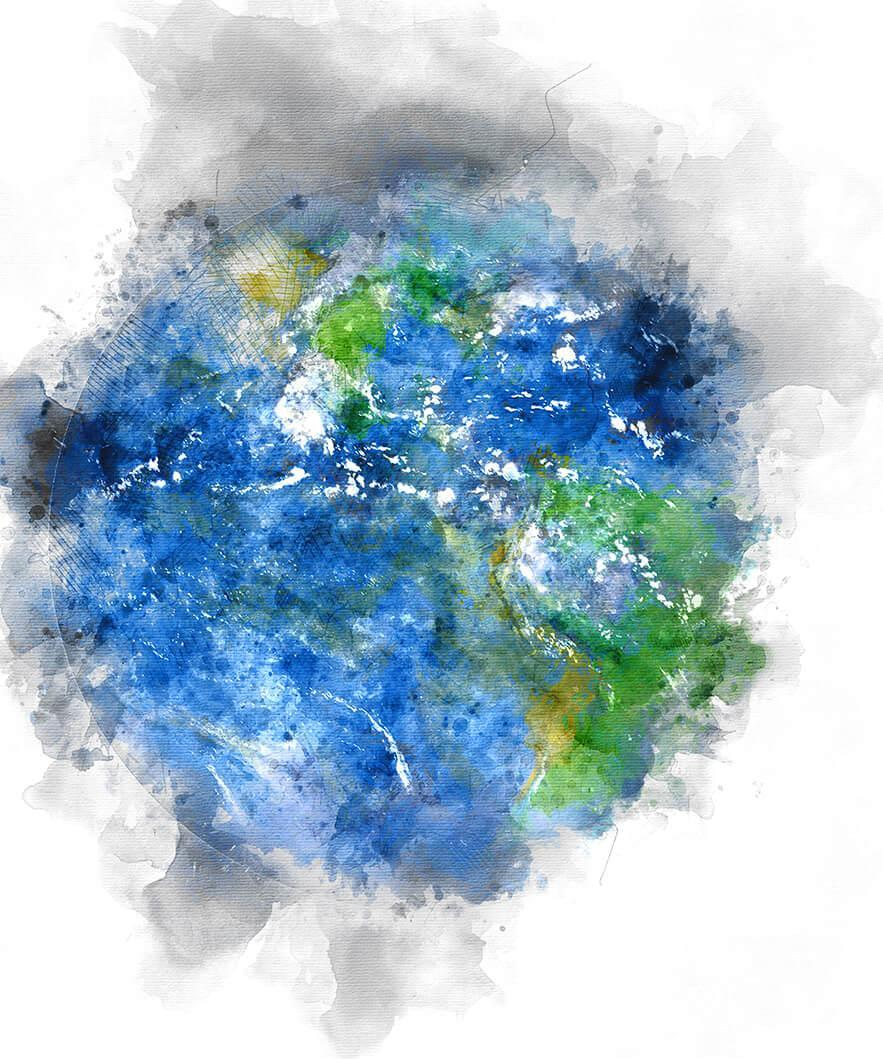


# Ecological footprint

Project done by Lămășanu Raluca  
Nechita Teodora  
Alexia Suciu  
Daria Mocan





Last year, we have  
used more from  
nature than our  
planet can  
regenerate in the  
entire year by the  
**END OF JULY.**

# Roadmap

What is the ecological footprint?

1

Ecological debtors and creditors

3

Uneven distribution of resources

5

How do we define biocapacity?

2

The whole world's footprint, biocapacity, and Overshoot Day

4

Possible reactions and individual ways to make a change

6



# 29<sup>th</sup> of July marks the Earth Overshoot Day for 2021

## What does that mean?

The Earth Overshoot Day marks the date when humanity has exhausted nature's budget for the year.



*Let us explain!*

- Every time we **produce** energy, food, fiber, paper, and so on, we **consume** Earth's diverse **resources** and make waste.
- Nature needs to have the capacity to meet our demands, in order to prosper.
- **THE ECOLOGICAL FOOTPRINT** is the way in which we measure our human demand on nature.

*EACH*



INDIVIDUAL,



HOUSEHOLD,



COUNTRY,



AND ALSO THE  
WHOLE WORLD

*ALL HAVE THEIR OWN ECOLOGICAL FOOTPRINT.*



*The footprint is expressed as*

Or gha/pers  
(global hectares  
per person)

land



water



to produce what we  
consume AND absorb  
the waste we generate

*How much do we need at the moment  
to sustain our life on earth yearly?*

1, 6 Earths.







That means that it would take one year and a half for our planet to regenerate what we use in one year!





*In order to understand how this happened, it is crucial to also define BIOCAPACITY:*

Biocapacity is the biological productive area available to provide the resources we use AND to absorb the waste.



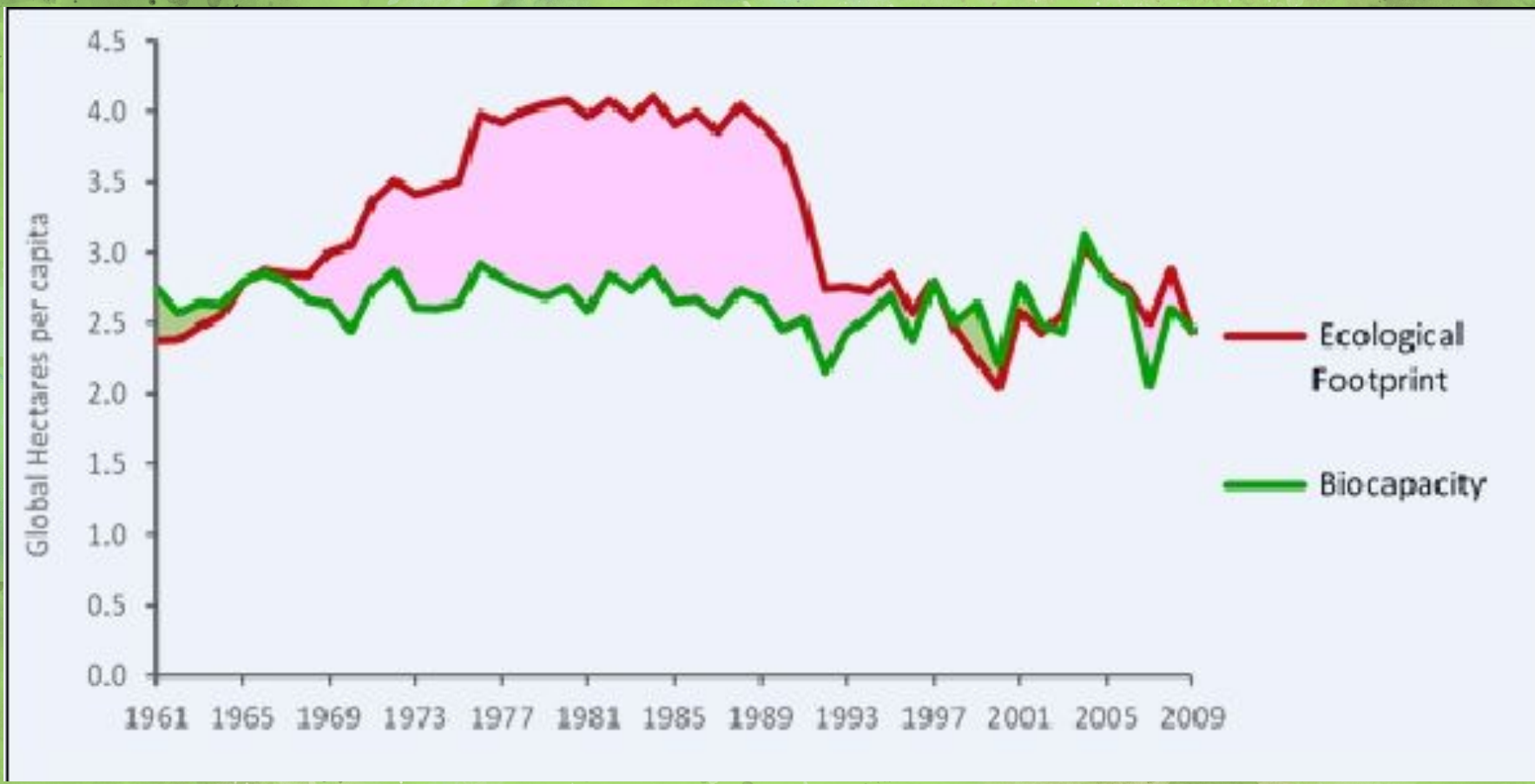
*Let's look at Romania as a first example.*

In 2018, we recorded an EF of 2.8 gha/capita with a biocapacity of 1.6.

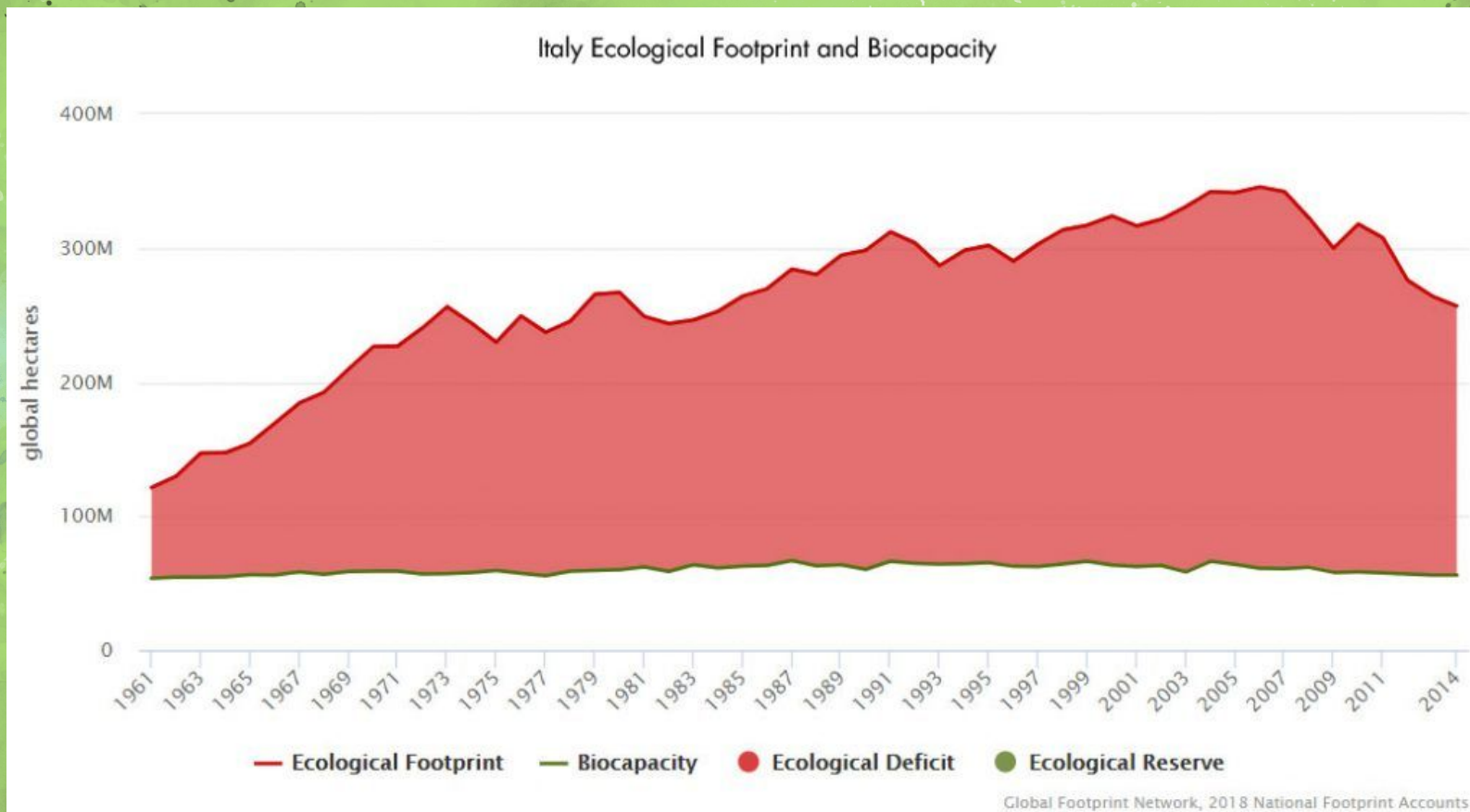
The difference was **-1.2**, meaning that we were an “ecological debtor”.

We consumed more than we could regenerate.

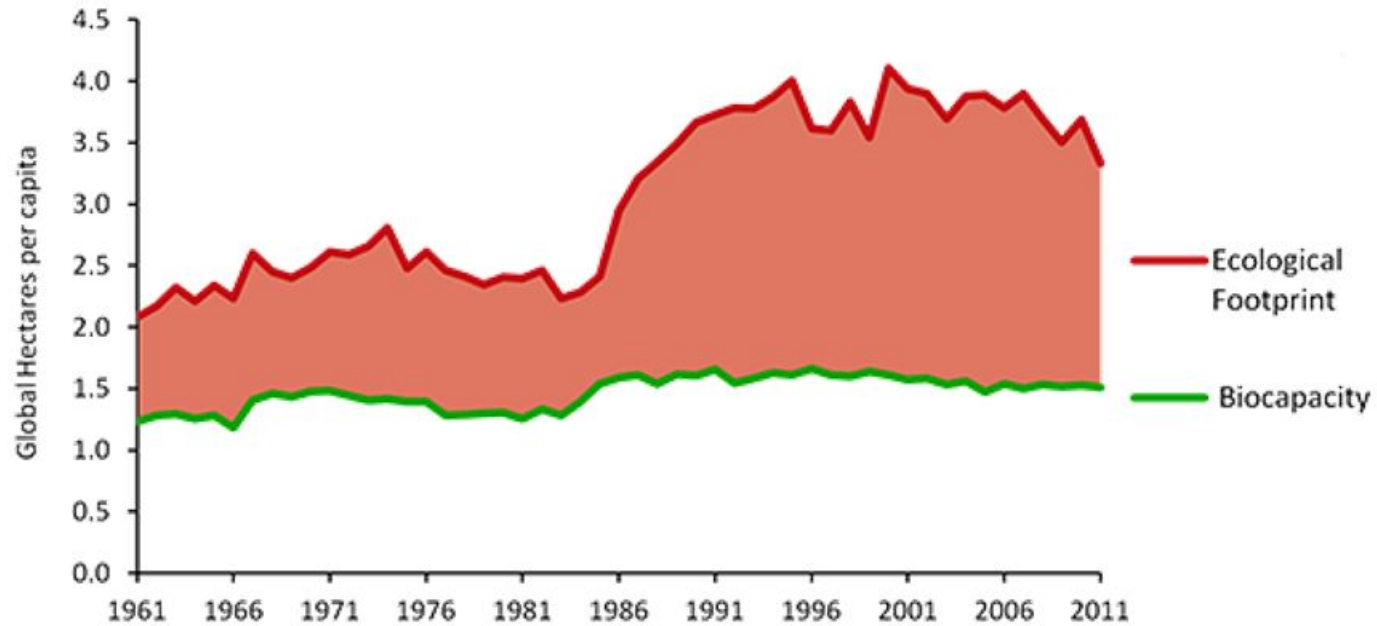




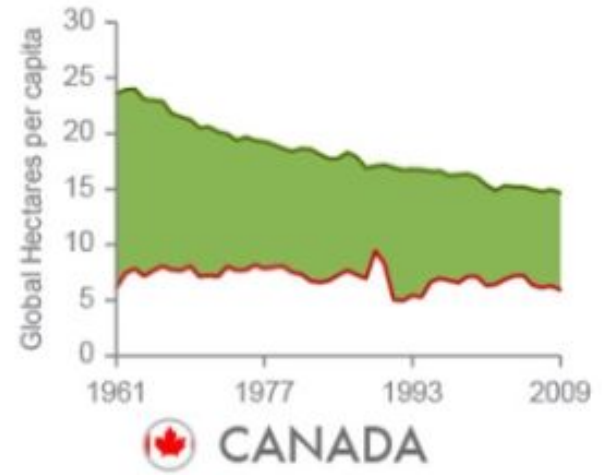
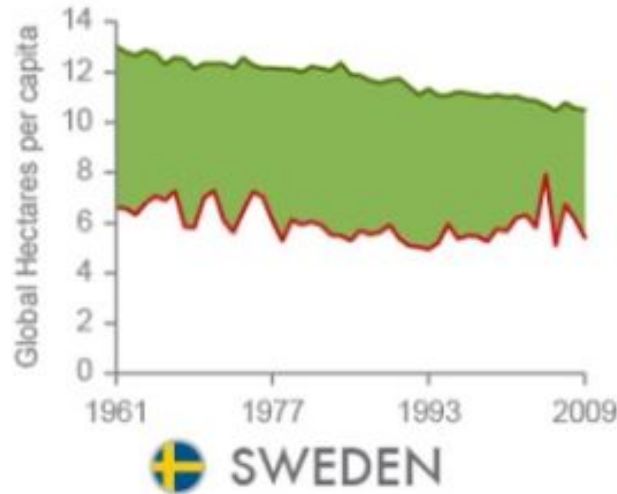
*This is Italy...*



...and Portugal.

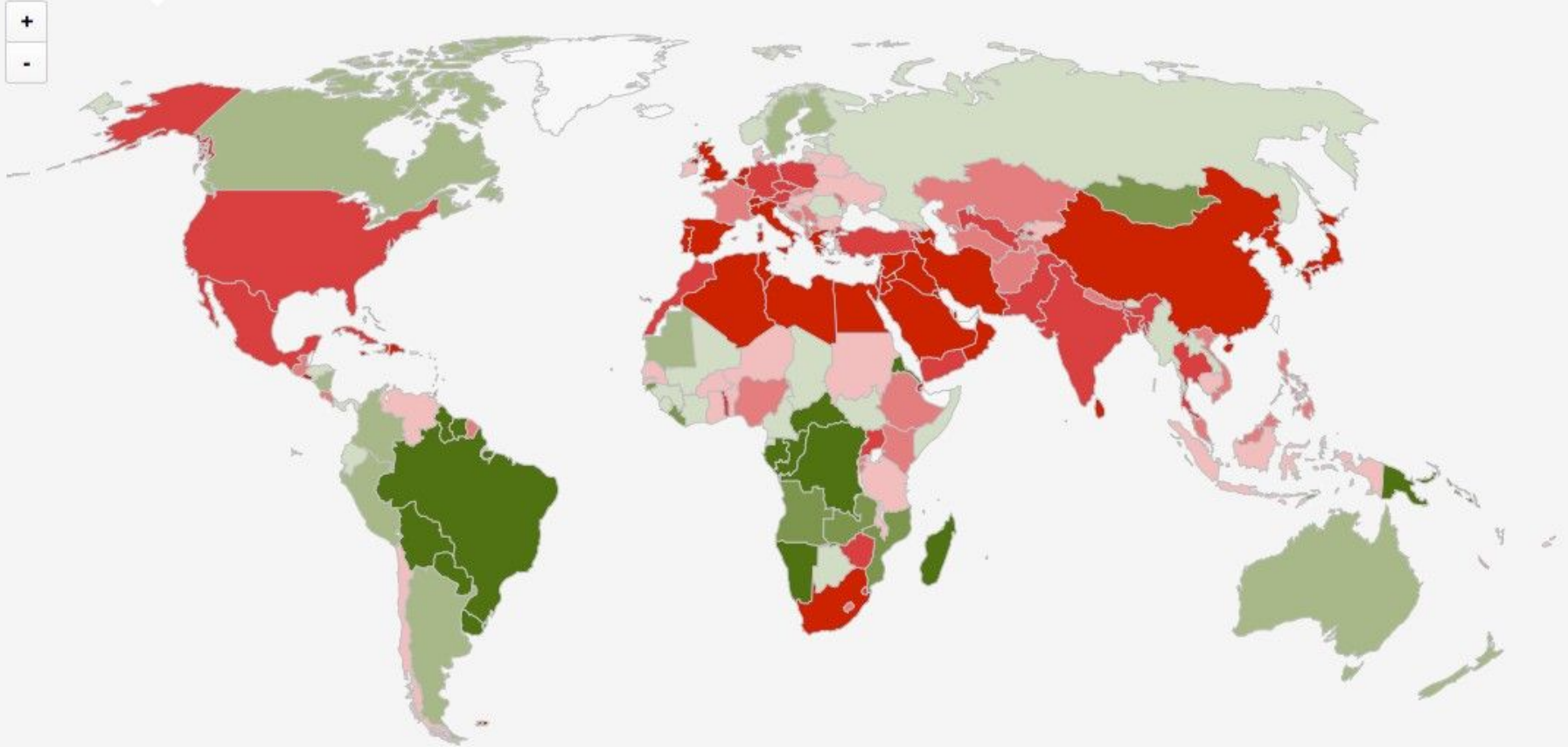


Thankfully, not all countries demand more than their ecosystems can provide. We call them *ECOLOGICAL CREDITORS*.



*Now, why don't we have a look at the whole world?*

All Ecological Footprint and biocapacity data is for 2013





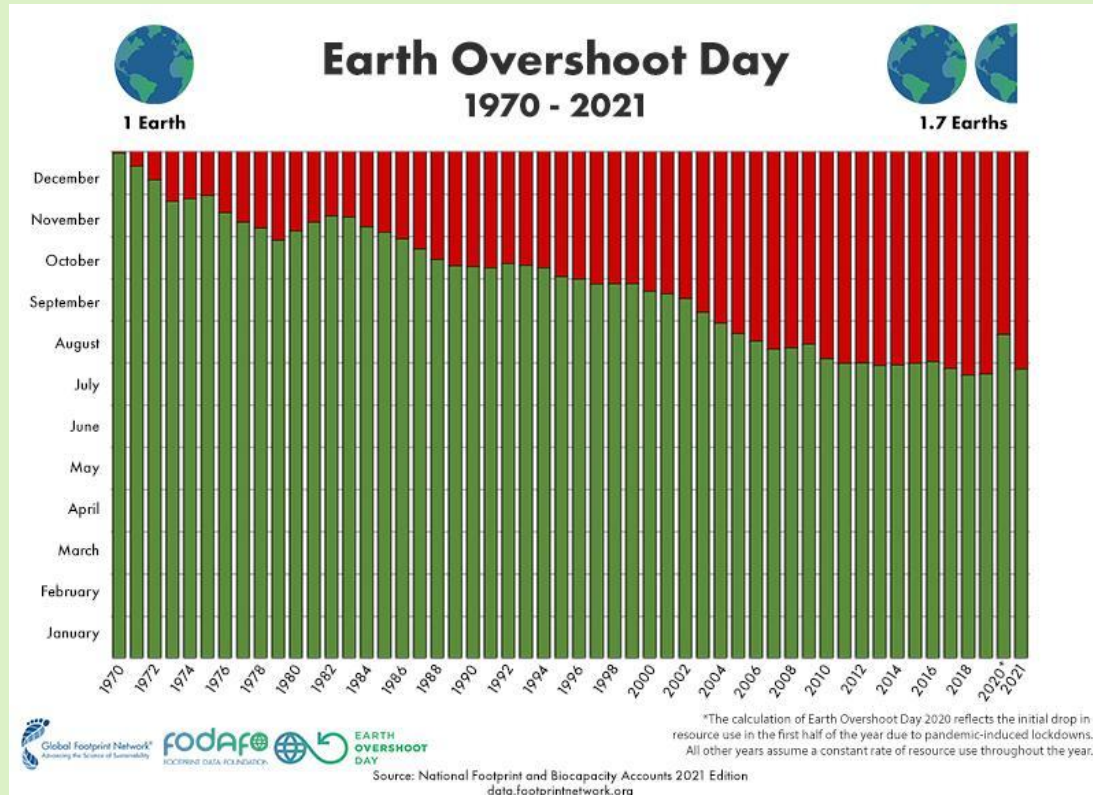
*Allow us to put it in perspective!*

## How many Earths would we need if the world's population lived like...



Source: National Footprint and Biocapacity Accounts 2021  
[data.footprintnetwork.org](http://data.footprintnetwork.org)

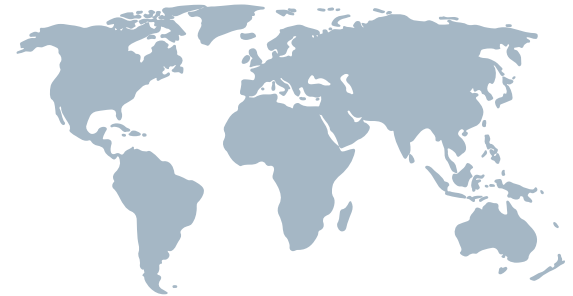
WHAT IS EVEN MORE WORRYING? EARTH OVERSHOOT DAY ARRIVES EARLIER EACH YEAR, ARRIVING BARELY AFTER HALF A YEAR PASSES.





Efforts to respond to COVID-19 have demonstrated that **shifting ecological resource consumption trends** in a short timeframe is possible.

*...and so, we can learn some POWERFUL LESSONS...*



- *Governments are capable of acting swiftly, both in terms of regulations and spending, when they put human lives above all else;*
- *Businesses and individuals alike can effectively align and collaborate in the pursuit of a shared goal when people recognise that their own lives, and that of the people they love, may be at risk;*
- *Biodiversity must be protected in order to protect our own health as well as the planet's;*
- *Future pandemics will only be avoided if people learn to live in harmony with nature*

*We have witnessed what is possible when humanity comes together to pursue a shared outcome.*

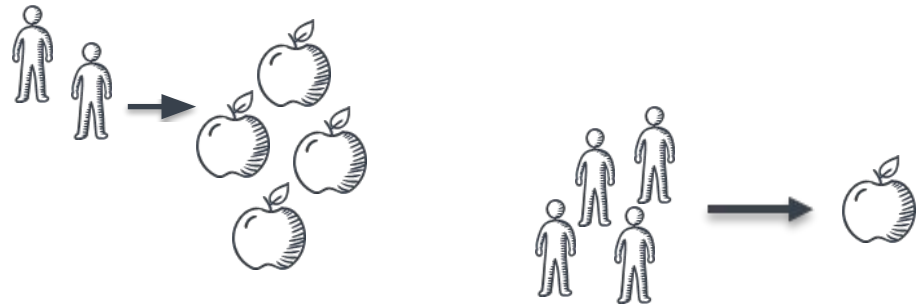
*What SHARED OUTCOME could be more important than our long-term survival on our **finite** planet?*



*The world can support billions, but not  
billionaires.*

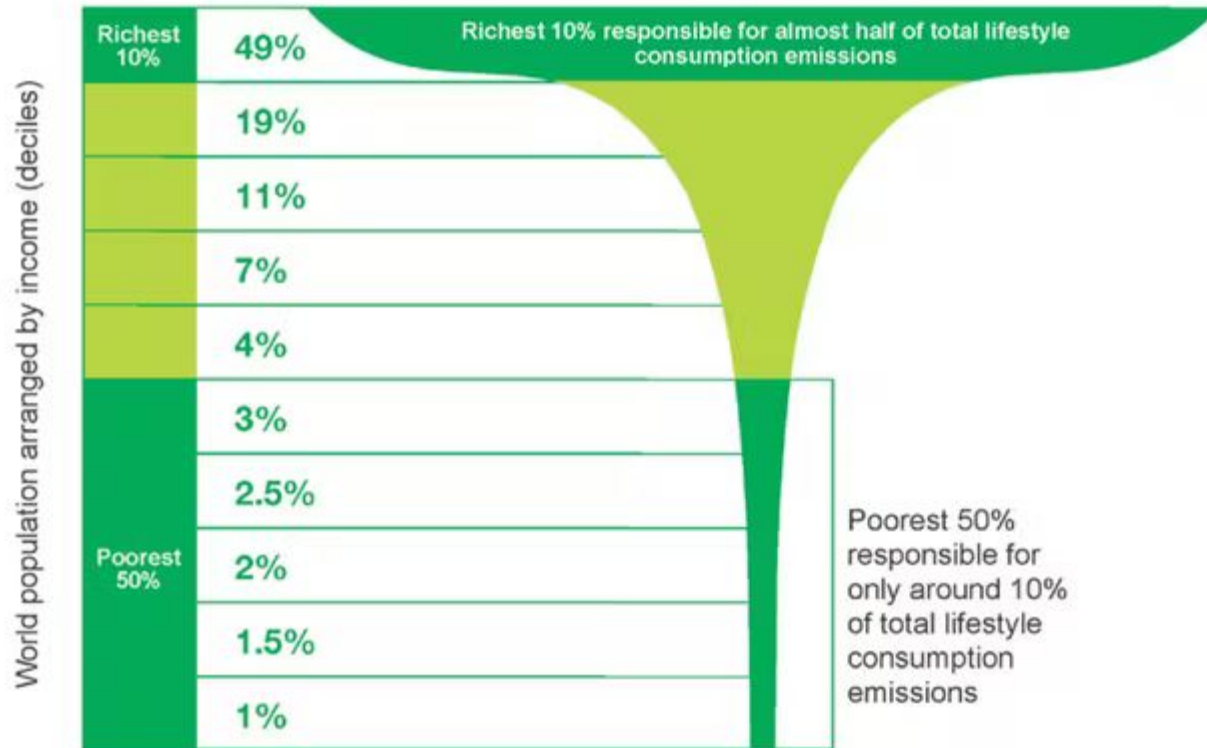
Global consumption is unevenly distributed, favours only a few and is extremely inefficient.

17% of the world's population consumes more than 80% of the resources.



**Figure 1: Global income deciles and associated lifestyle consumption emissions**

**Percentage of CO<sub>2</sub> emissions by world population**



Source: Oxfam

*These statistics may induce a lot of emotions. How do you feel hearing about everything we mentioned above?*

Most of us feel **scared or anxious** when thinking about difficult realities like climate change and ecological overshoot. And that's okay. **Try taking this simple action today: share about how you feel and what you stand for.**

We need your **curiosity, enthusiasm** and energy to bring us back in balance with the ecological budget of our planet.



Everyone feels **helpless** at some point in our personal journey, especially as we learn more about global challenges. We invite you to challenge yourself to step out of that zone now—in truth, there's so much each one of us can do.

Being alive isn't a crime, so do not feel **ashamed**. A lot of people say that we, the consumers, are at fault and need to change. That's just not true. We also need to change our cities and governments.





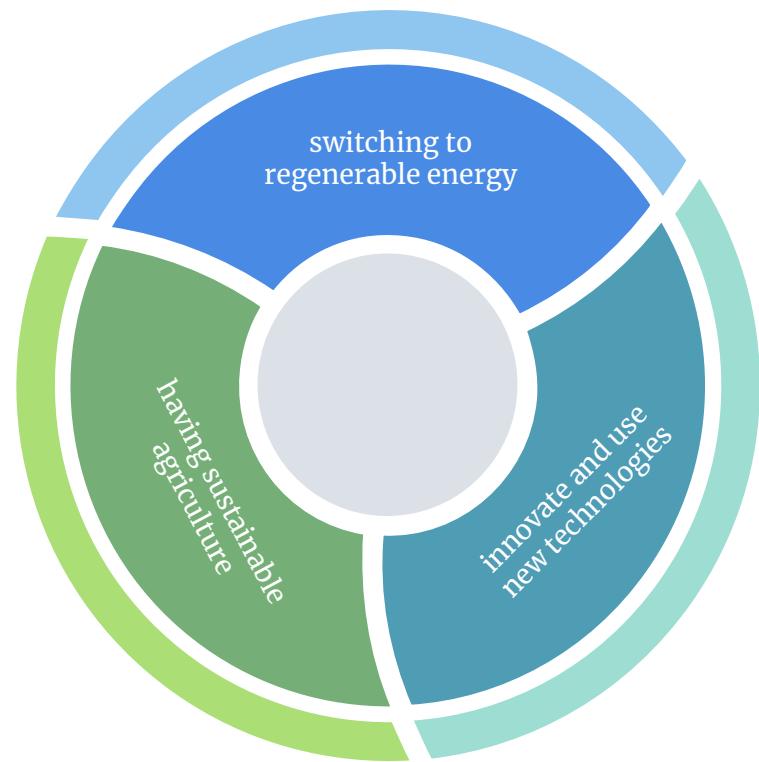
- ❖ Is *consumers* all that we are?  
Or are we being manipulated  
into thinking that is our  
identity?
- ❖ Do we have the power to  
change the outcome of the  
climate crisis if we *act  
individually*?
- ❖ Are we the ones completely  
*responsible*?



*The International Energy Agency projects that:*

- **40% of emissions** cuts needed to decarbonize the global economy will **come from policies** over which the public has little control
- **just 4%** are expected to **come from purely personal actions** like flying less or walking to work
- **55% comes from** changes that need a mix of **government action and active consumer choices**

*We must pressure large companies and even countries into doing things like:*





## *Be part of the change!*

### **Review the way you eat!**

Meat and dairy have a much larger carbon footprint than plant-based food. Try going vegan one or two days a week!

Try buying locally and seasonally, and don't let food you already bought go bad.

### **Buy things that are made to last.**

Buying cheap objects of poor quality will cost you more, eventually, because you will have to replace them more often. And it will also hurt the environment.

Think twice before buying something that you will throw away in a few months, only because it looks nice on the shelves of your supermarket.

### **Evaluate the way you travel.**

Travelling takes up a big percent of a person's footprint.

Everybody knows that public transportation is more sustainable. But if you must take the car, try carpooling.

Also, reducing flying has a big impact on an individual's footprint.



*The Ecological Footprint is important because we can only change what we can measure.*

*It allows us to understand our habits and the way they influence Earth and the future generations.*

*Once we have acknowledged the problem, we can start finding solutions.*





*Thank you for  
your attention!*

## Bibliography

1. <https://www.footprintnetwork.org/our-work/ecological-footprint/>
2. <https://www.overshootday.org/>
3. [https://wwf.panda.org/discover/knowledge\\_hub/all\\_publications/ecological\\_footprint2/](https://wwf.panda.org/discover/knowledge_hub/all_publications/ecological_footprint2/)
4. [https://youtu.be/g\\_aguo7VoQ4](https://youtu.be/g_aguo7VoQ4)
5. <https://youtu.be/3M29BY86bP4>
6. <https://www.footprintcalculator.org/home/en>