

# Sus-GAME-ability

A general introduction into the world of sustainability

**Teacher: practical guide**



# What is sustainability?

- Sustainability comes from forestry
  - „Not to cut down more trees than what can grow back“
  - In this way, the forest is preserved and can be used for generations to come
- For people in general this also now means :
  - Do not consume more than can be regrown at the same time
  - Looking after our environment and not unnecessarily polluting it



# Reasons why we should live more sustainably

- Climate change
- Plastic waste in the environment
- Deforestation
- Air pollution
- Species extinction

# Air pollution

- We continuously pollute our air every day, some of the reasons are:
  - Exhaust fumes from cars and factories
  - Fireworks and Easter (or other mass scale) celebration fires
- This pollution is especially noticeable on days like January 1, after all the fireworks



<https://www.n-tv.de/wissen/Die-schaedlichen-Seiten-des-Feuerwerks-article20203921.html>



[https://www.t-online.de/auto/elektromobilitaet/id\\_82128428/was-dieselabgase-so-gefaehrlich-macht.html](https://www.t-online.de/auto/elektromobilitaet/id_82128428/was-dieselabgase-so-gefaehrlich-macht.html)



# Plastic waste in nature

- Progressively more trash ends up in our forests or on our streets
  - People often just throw their garbage out of the moving car or simply throw it on the ground or into nature while taking a walk
- This garbage takes hundreds of years to completely (or even partially) decompose and disappear



<https://www.welt.de/regionales/bayern/article171413269/Warum-Abfall-im-Wald-fuer-Menschen-gefaehrlich-werden-kann.html>



<https://www.fnp.de/frankfurt/frankfurthessen-einfach-autofenster-tonnenweise-abfall-liegt-unseren-autobahnen-11748385.html>

# Global warming

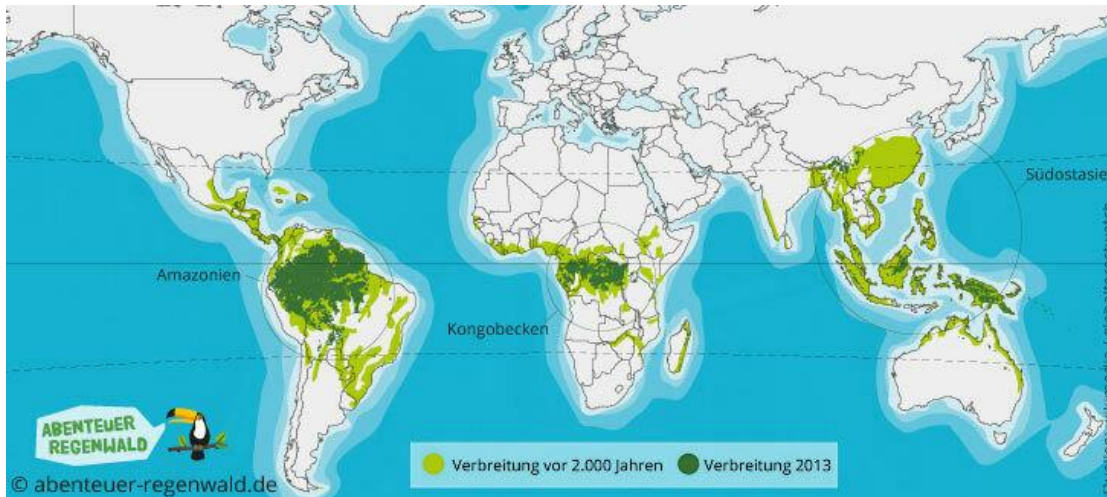
- Researchers have proven that due to the constant pollution from exhaust fumes from factories and cars, holes are created in our ozone layer, causing our planet to become increasingly warmer
- This has the consequence that it snows much less than before and glaciers melt more increasingly



<https://kurier.at/wissen/oesterreichs-gletscher-bilder-eines-niedergangs/400318197>

# Forests clearing

- As humans need more evermore wood and put way too little emphasis on recycling and reuse, progressively more forests are being cleared away
- Since this clearing proceeds faster than trees can grow back again, mankind faces the problem that more forests simply disappear



<https://www.abenteuer-regenwald.de/wissen/abholzung>

# The United Nations (UN/UNO)

- The United Nations (UN) consists of 193 states from all around the world
- The goals of the UN include:
  - Safeguarding of world peace
  - Observance of international law
  - The protection of human rights
  - Ecological sustainability



[https://de.wikipedia.org/wiki/Vereinte\\_Nationen#/media/Datei:Flag\\_of\\_the\\_United\\_Nations.svg](https://de.wikipedia.org/wiki/Vereinte_Nationen#/media/Datei:Flag_of_the_United_Nations.svg)



# 17 SGD's of the UN

- The UN has defined 17 Sustainable Development Goals (SDGs), which are intended to ensure sustainable development
- With these goals one would like to achieve that a durable humane life is made possible and at the same time, the environment is preserved



<https://www.un-page.org/page-and-sustainable-development-goals>

# Susgameability

<https://scratch.mit.edu/projects/426233912/fullscreen/>



<https://scratch.mit.edu/projects/426233912/fullscreen/>

# How can we live more sustainably?

- There are several areas in which we can live more sustainably:
  - Household
  - Shopping
  - On the road & mobility

## Live more sustainably : Household

- Use washing machines and dishwashers to their full capacity
  - When we turn on a half-full washing machine or dishwasher, we use the same amount of water and energy as when we turn on a full washing machine/dishwasher
- Do not turn on the heating and open the window(s) at the same time
  - If we have the window constantly tilted while heating a room or house, we waste a lot of energy
- Let laundry dry in the (fresh)air
  - If we are not pressed for time, we can also air dry clothes in or outside, which saves energy that we would otherwise use in the dryer



## Live more sustainably : Shopping

- Use cloth bags or a backpack when shopping
  - We often buy new plastic bags every time we go shopping, these bags usually end up in the trash or thrown away somewhere
- Plan your shopping
  - Large amounts of food are often thrown away because people plan their meals wrong and buy way too much
- Buy more regional products
  - Buying regional products saves a lot of transportation which means less pollution for the environment

## Live more sustainably : On the road & mobility

- Ride your bike more often
  - We can cover many distances by bicycle instead of by car
- Public transport
  - If the distance is too far to go by bike, you could also think about taking the bus or train
- Plan your trips
  - Before you leave by car, you can think about doing several things at once and save yourself more car trips, which means reduced pollution

## Living more sustainably : The 3Rs

- Reduce: cut down on the amount of waste we throw away, e.g. planning better what we buy
- Reuse: instead of throwing away things find a new use or buy items from second-hand stores
- Recycle: be sure to recycle and buy products that are, or can be, recycled



# Kahoot!

- Visit: <https://create.kahoot.it/share/sustainability/e92e4aa3-2e32-4817-9976-fb53d2b04cad>
- Press Play on the left side of the screen
- After that, select „Teach“
- Select the game mode (Mostly Classic so that everyone can participate alone)
- Have the students enter in the kahoot.it the code you just generated
- Play!



Supported by:



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