ANA
Administration de la navigation aérienne

# $CO_2$ AWARENESS BOOKLET

EMAS
LU - 000008

# INTRODUCTION

Greenhouse gas emissions due to human activities, and more particularly $CO_2$ and methane, have a real impact on the environment and lead in particular to climate change, which is a threat to all biodiversity.

The forecasts of IPCC and other organizations are formal: the climate is warming faster than expected, giving rise to extreme weather events.

## CONSEQUENCE/NON-COMPLIANCE

Disastrous & irreversible, experts speak of collapsology.

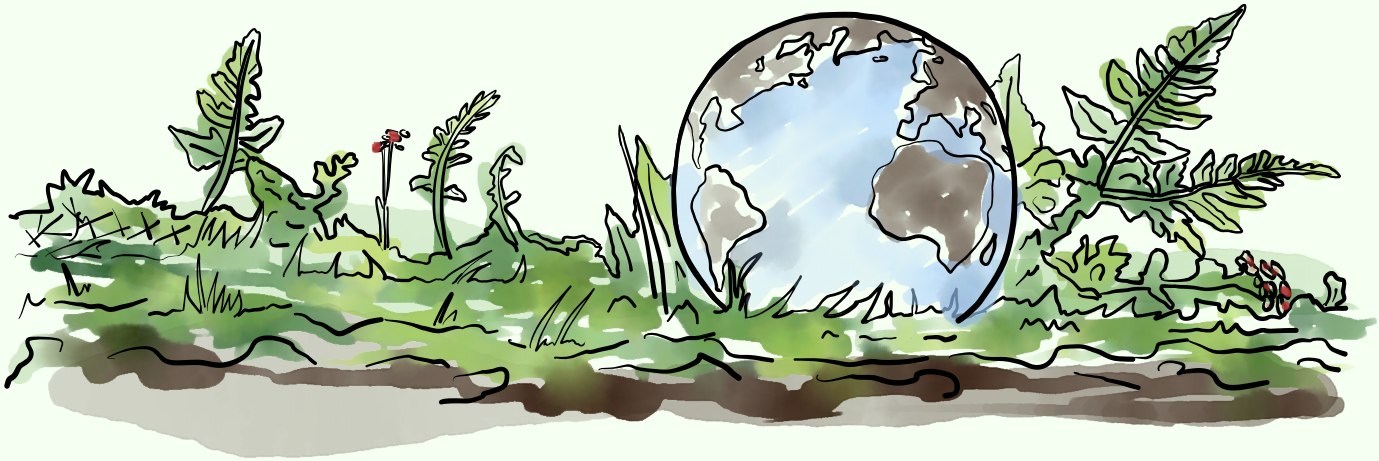
# WHAT CAN WE DO?

### 1.3 TONS OF $CO_2$ / CAPITA IN 2050

Today in Europe: average of 7.5 tons / capita

### UNDER 2°C TARGET

Preferable to 1.5 degrees Celsius



### LIMIT EFFECTS OF GLOBAL WARMING

Reduce carbon footprint related to human activities.

### LIMIT THE GREENHOUSE GAS EMISSIONS

at the level of companies & of all citizens.

# 1.3 TONS $CO_2$ IN PICTURES

## 1 ANA CAR

1.3 tons of $CO_2$ / 8000-9000 km


## SMALL FAMILY

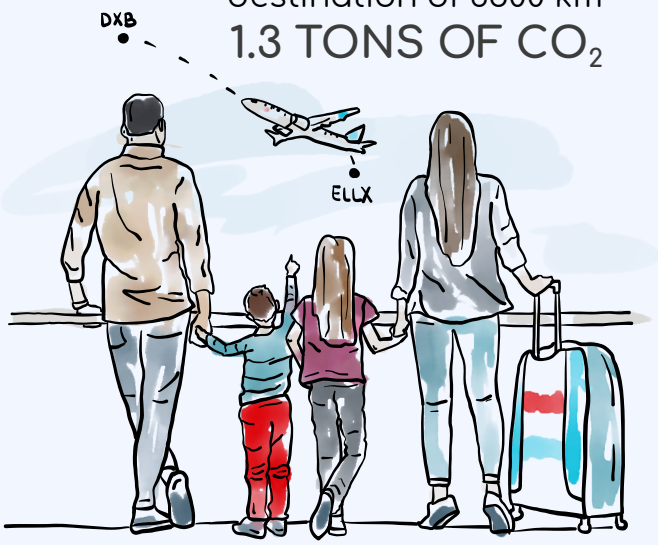
in Bangladesh

produces
1.3 TONS OF $CO_2$ / YEAR
with everything they do.

## ROUND FLIGHT

OF A FAMILY OF 4

destination of 6500 km
1.3 TONS OF $CO_2$



# TRANSPORT & TRAVELS

Around 21.8% of the $CO_2$ emitted worldwide comes from the transport sector. In 2018 it was a total of around 8.26 billion tons of $CO_2$. The sector with the largest emissions of carbon dioxide is electricity and heat generation.

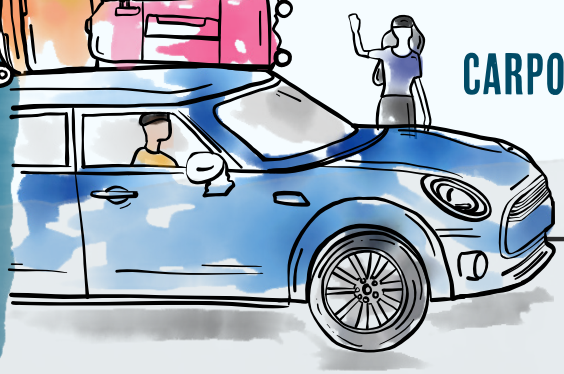
Among the modes of transport, the road is the number one climate sinner - around 18 % of global $CO_2$ emissions in 2019 were produced by road vehicles. The contribution from aviation and shipping was significantly lower at just under 3 %.

## TRANSPORT SECTOR
21.8 % OF $CO_2$
emitted worldwide

2018
it was a total of around
**8.26 billion tons of $CO_2$**

## THE ROAD
IN 2019
18% of global $CO_2$ emissions

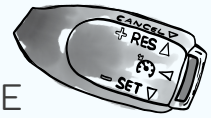
**Do not weigh down your car** with extra things you do not need on your trip.



## CARPOOLING

## CHECK YOUR TIRES
REDUCE EMISSIONS

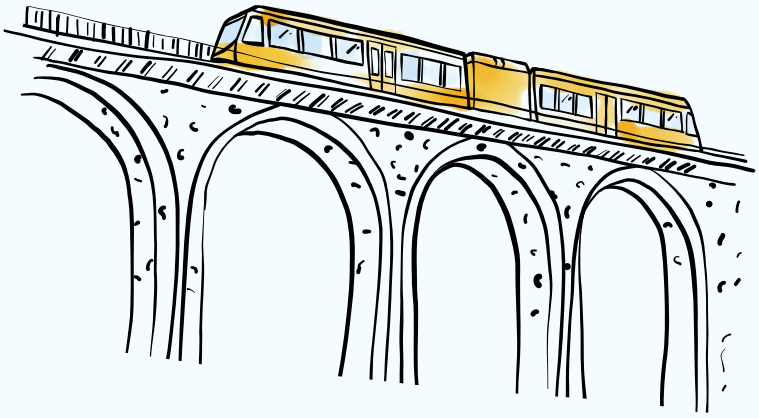
## USE
CRUISE CONTROL
ON LONG JOURNEYS




REGULARLY
## MAINTAIN YOUR CAR

## SHRINK YOUR CAR!

A heavy off-road vehicle or a large sedan can travel 5,000KM with 1.3 tons of $CO_2$ emissions.
**3L CAR = 18,000 KM/1.3 TONS $CO_2$**



# RIDE A BIKE

It takes up hardly any space and no fuel, it's quiet, clean and keeps you fit!

# TRY TO

take the train & save in average 2 TONS / $CO_2$ / YEAR

# HOTELS ARE ENERGY-INTENSIVE

You need energy for heating, hot water, for the pool, for air conditioning, for washing and drying bed linen and towels, for the wellness area, for large breakfast and dinner buffets and much more.

## IN GENERAL

The more luxury a hotel offers, the worse the carbon footprint. According to figures from the Association of German Travel Management, an average 1-star hotel in the UK produces 18 kilos of $CO_2$ per person per night, while a 5-star hotel produces 27 kilos.


## AROUND 240 KG

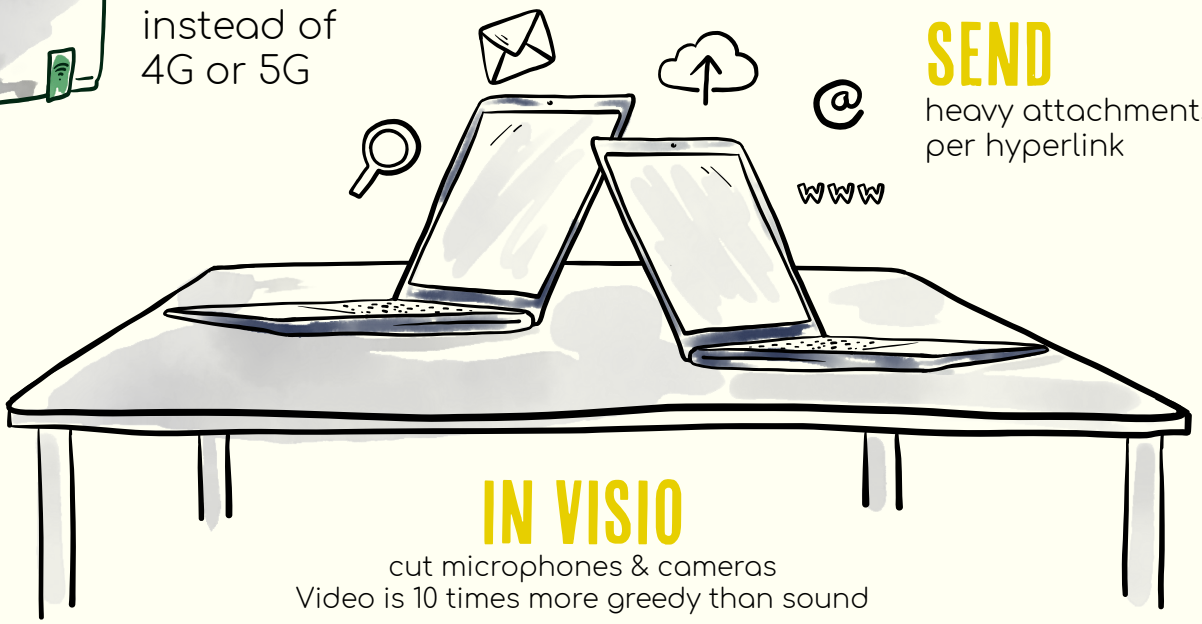
The WWF has calculated how many $CO_2$ emissions are generated per person during a two-week holiday in Mallorca in a 4-star hotel including full board.


## CONNECT IN WIFI

instead of 4G or 5G

## LAPTOP VS. DESKTOP COMPUTER

(80% less power consumption)




## SEND

heavy attachments per hyperlink

## IN VISIO

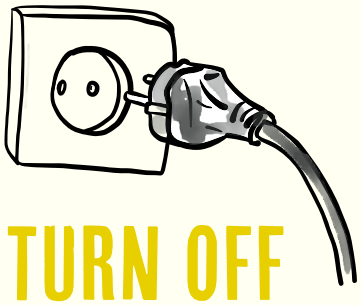
cut microphones & cameras
Video is 10 times more greedy than sound

# OFFICE

Digital energy consumption emits currently 4% of the total greenhouse gases and is evaluated to 8% in 2025. The Web is also a source of emissions: the more we download and upload, do upgrades, surf around on Webpages, the more energy is consumed.

## UNPLUG

when not in use



## TURN OFF

computer equipment in the evening before returning or after use

## EMPTY

your recycle bin and emails regularly

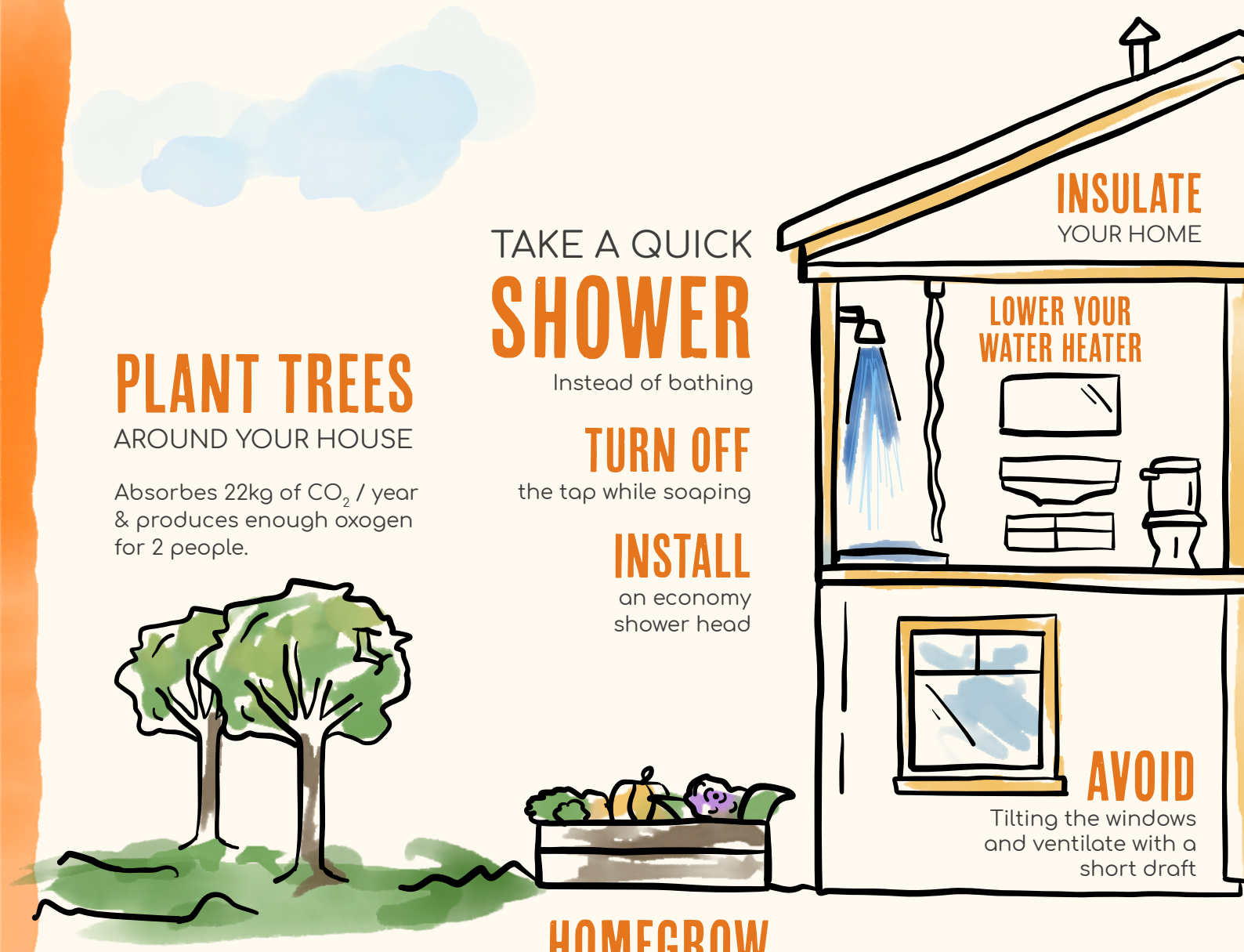
## LIMIT THE USE

of printers and photocopiers as much as possible.

# AT HOME

Businesses and homes contributed 13% of total greenhouse gas emissions. Most of these emissions come from heating sources that burn fossil fuels.

Other factors include waste handling from food waste and other methane-emitting sources in landfills, and using products that contain greenhouse gases like HFCs (refrigerants). Seal your home well. Hot spots can include the attic, windows, and doors, where warmth and coolness can escape.



## INSULATE
YOUR HOME

## LOWER YOUR WATER HEATER

TAKE A QUICK
## SHOWER
Instead of bathing

## TURN OFF
the tap while soaping

## INSTALL
an economy shower head

## PLANT TREES
AROUND YOUR HOUSE

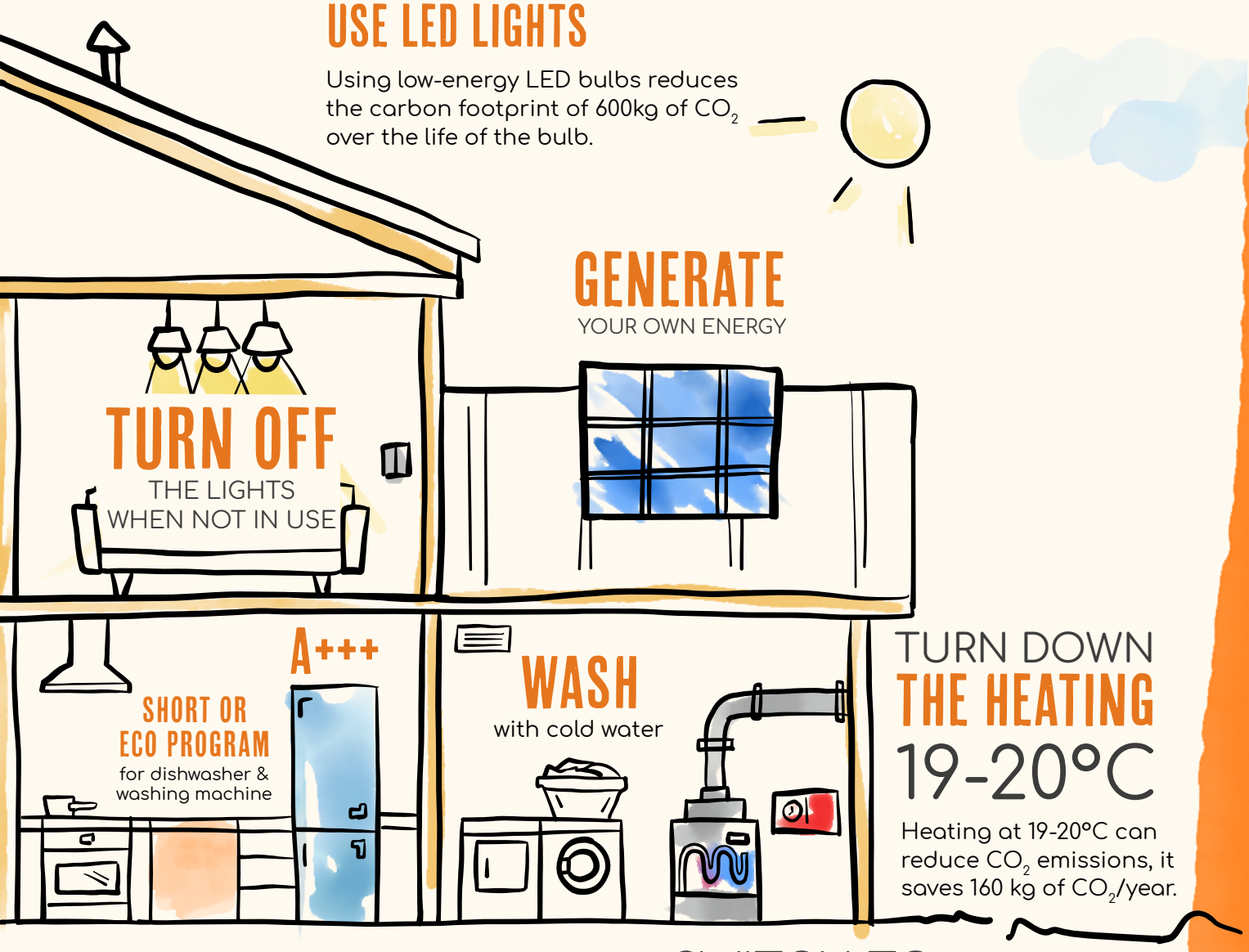
Absorbes 22kg of $CO_2$ / year & produces enough oxogen for 2 people.

## AVOID
Tilting the windows and ventilate with a short draft

## HOMEGROW
YOUR FRUIT & VEGETABLES

## USE LED LIGHTS

Using low-energy LED bulbs reduces the carbon footprint of 600kg of $CO_2$ over the life of the bulb.



## GENERATE
YOUR OWN ENERGY

## TURN OFF
THE LIGHTS
WHEN NOT IN USE

## A+++
## SHORT OR ECO PROGRAM
for dishwasher & washing machine

## WASH
with cold water

## TURN DOWN THE HEATING 19-20°C

Heating at 19-20°C can reduce $CO_2$ emissions, it saves 160 kg of $CO_2$/year.

## REPLACE OLD REFRIGERATORS

## SWITCH TO GREEN ENERGY

### DEFROST
the freezer if there is more than 3mm of ice.

### CLEAN
the fridge rack every 3 monts.

### DO NOT
set your refrigerator & freezer temperatures lower than necessary.

# HOUSEHOLD OF 2 PEOPLE ON 70 M²

Lowers its room temperature in the whole apartment by one degree, then it saves 160 kilos of $CO_2$ per year. Heating and electricity account for 21% of $CO_2$ emissions / capita in Germany.

This means that our houses and apartments blow at least as many greenhouse gases into the air as the entire transport sector.

# HEATING IN MODERATION

## BUILDINGS WITH MANUAL ADJUSTMENT

Reduce the ambient temperature setpoint to 20°C (for information, on a thermostat mounted on the radiators, position "3" corresponds to 20°C) .

## BUILDINGS WITH CENTRALIZED REGULATION

Preferably leave in automatic mode, in particular when leaving the office.

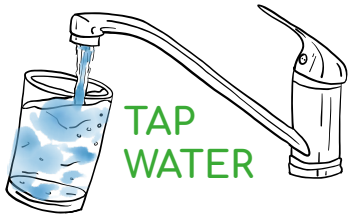
# FOOD

Food emissions vary greatly depending on product, though **red meats typically have the largest carbon footprints.** Food production is a major source of greenhouse gas emissions worldwide.


THOSE WHO THROW AWAY LESS FOOD, LIVE A MORE CLIMATE-FRIENDLY LIFE

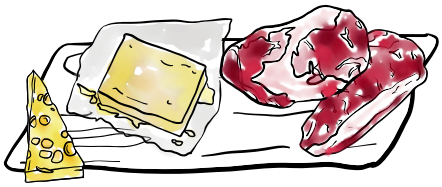
## TRY vs. AVOID

REGIONAL & SEASONAL



TAP WATER

ANIMAL PRODUCTS



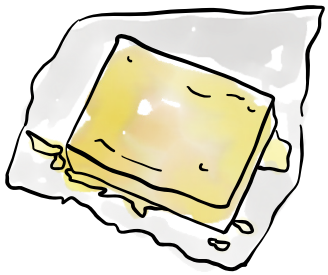

ALTERNATIVES TO MEAT AND DAIRY PRODUCTS

BAN PLASTIC

## NUTRITIONAL FOOTPRINTS BY DIET FORMS

| LATTER | VEGETARIAN | VEGANS |
|---|---|---|
| 1760 kg/$Co_2$/year | 1160 kg/$Co_2$/year | 960 kg/$Co_2$/year |

# 1KG BUTTER



**emission of 23 kilos of $CO_2$**

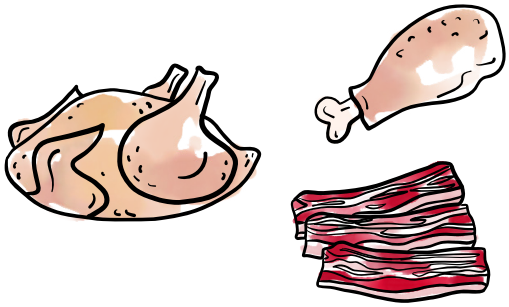
Cream and cheese also don't do well with 7 to 8 kilos of $CO_2$.

## AVERAGE CONSUMERS IN INDUSTRIALIZED COUNTRIES

pollute the atmosphere correspondingly through their meat and dairy products consumption alone.

## EVERY KILO OF BEEF

AROUND 13 KG OF GREENHOUSE GASES



## PORK AND POULTRY

3-4 kg of $CO_2$

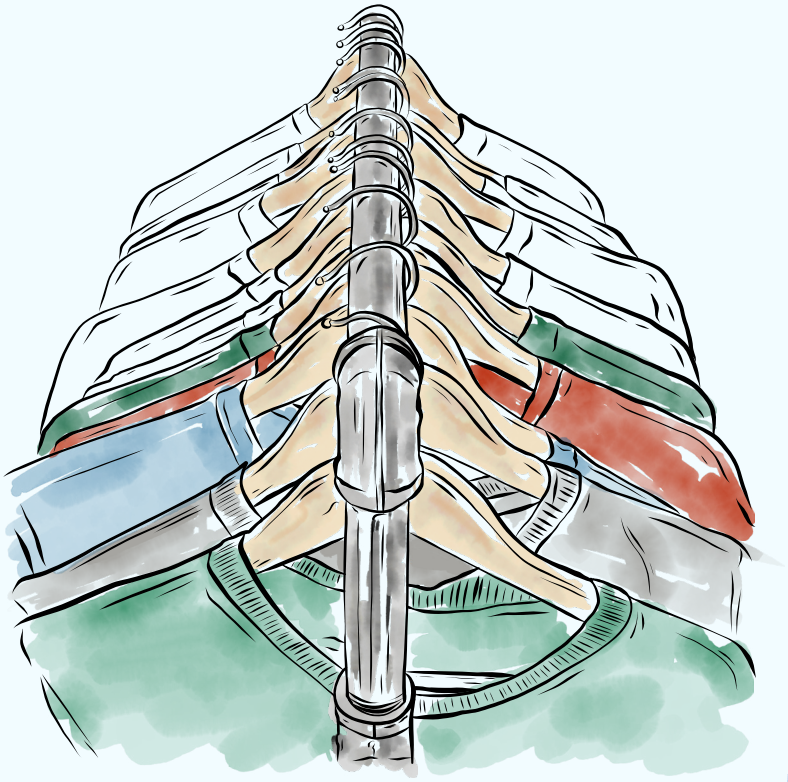

ORGANIC PRODUCTS ARE SOMEWHAT MORE CLIMATE-FRIENDLY

1kg of beef produced causes slightly less emissions at 11 kg

# CLOTHES

The textile industry is next to the transport sector one of the **biggest climate sinners**.

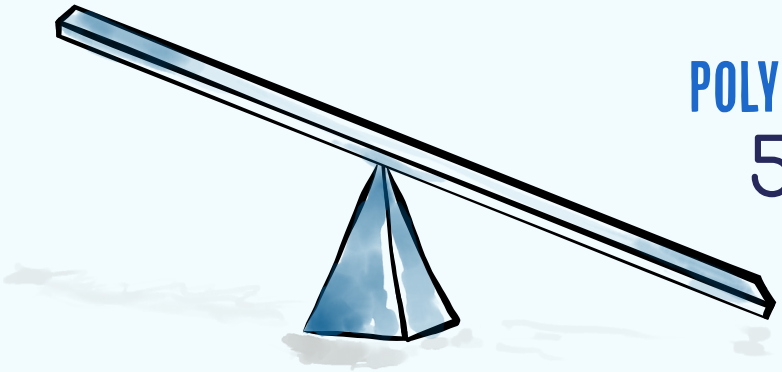
In 2015, it blew more $CO_2$ into the air than all international flights and shipping combined.



## COTTON T-SHIRT

4.3 kilos

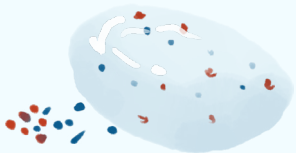
of greenhouse gases



## POLYESTER T-SHIRT

5.5 kilos

of greenhouse gases



POLYESTER BRINGS
MICRO PLASTIC
INTO OUR SEAS

COTTON is a
**WATER WASTER**

Rely on **organic cotton**, it causes only slightly more than half of the $CO_2$ emissions that are generated during the cultivation of onventional cotton, because synthetic fertilizers and pesticides are dispensed with in organic cultivation.

## EXCHANGE YOUR CLOTHES

with others

rely on

## 2ND HAND

Resources consumption is directly linked to emissions

# 80% OF ALL RESOURCES ARE CONSUMED BY 20% OF MANKIND

# IF THE OTHER 80% WOULD CONSUME AS THOSE 20%

WE WOULD NEED

# 4 TIMES THE PLANET EARTH !

In Europe we are consuming the resources of 3 times our planet!

## IF YOU WANT TO KNOW HOW MUCH RESOURCES YOU ARE USING, SIMPLY FOLLOW THE LINK:

www.footprintcalculator.org

ANA SAVED 1500 SHEETS OF PAPER AND 1.8 KG $CO_2$
BY NOT PRINTING THIS DOCUMENT

“

# THE GREATEST THREAT TO OUR PLANET IS THE BELIEF THAT SOMEONE ELSE WILL SAVE IT.

# LET’S START FRESH!

– Quote by Robert Swan, Author –

”

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