

LESS PLASTIC, MORE FUTURE



**Answers and
Solutions**

www.greenagents.de

WORKBOOK WITH ANSWERS

"LESS PLASTIC - MORE FUTURE"

IN THIS WORKBOOK YOU WILL FIND ALL
SOLUTIONS, ANSWERS, ADDITIONS,
FURTHER LINKS AND INFORMATION



TABLE OF CONTENTS



sustainability
Pages 4-5



Plastic & SDGs
Pages 6-7



Plastic waste
Pages 8-9



Microplastics
Pages 10-11



Plastic in clothes
Pages 12-15



Plastic in water
Pages 16-17



Who can solve the
problem?
Pages 18-19



Footprint & Handprint
Pages 20-21



Space for your
thoughts
Pages 22-23



DEFINITION VON "NACHHALTIGKEIT" IN EINFACHER SPRACHE

„NACHHALTIGKEIT ODER NACHHALTIGE ENTWICKLUNG BEDEUTET, DASS DIE BEDÜRFNISSE ALLER MENSCHEN IN DER GEGENWART, ALSO HEUTE, SO BEFRIEDIGT WERDEN, DASS DIE ZUKÜNFTIGEN GENERATIONEN, ALSO ALLE MENSCHEN DIE IN DER ZUKUNFT AUF DER ERDE LEBEN WERDEN, NICHT IN IHREN BEDÜRFNISSEN EINGESCHRÄNKT WERDEN.“

Nachhaltigkeit bedeutet:

- Die Menschen sollen in Zukunft gut und gesund leben.
 - Die Menschen sollen die Natur gut behandeln.
 - Die Menschen sollen andere Menschen gut behandeln.
 - Die Arbeitswelt soll Natur und Menschen gut behandeln.
 - Der Natur, der Arbeitswelt und den Menschen soll es lange Zeit gut gehen.
-

DEFINITION OF “SUSTAINABILITY” IN SIMPLE LANGUAGE

SUSTAINABILITY OR SUSTAINABLE DEVELOPMENT MEANS THAT THE NEEDS OF ALL PEOPLE TODAY ARE MET IN A WAY THAT DOES NOT LIMIT THE NEEDS OF FUTURE GENERATIONS, MEANING THE PEOPLE WHO WILL LIVE ON EARTH IN THE FUTURE.

Sustainability means:

- People should live good and healthy lives in the future.
 - People should treat nature well.
 - People should treat other people well.
 - The working world should treat both nature and people well.
 - Nature, the workplace, and people should thrive for a long time to come.
-

NACHHALTIGKEIT

WAS IST DAS?

Was bedeutet
"nachhaltig" für dich?

Hast du das Wort
schon mal gehört?

Kennst du das Wort in
anderen Sprachen?

z.B. Englisch „Sustainability“,
Französisch „Durabilité“,
Russisch „устойчивость“,
Chinesisch „可持续性“,
Türkisch „sürdürülebilirlik“

Warum ist
das wichtig?

Nachhaltigkeit ist wichtig,
damit es allen Menschen und
der Natur gut geht, heute
und auch in der Zukunft.

Kennst du Beispiele
für Nachhaltigkeit?

Produkte aus dem eigenen
Alltag, Verhaltensweisen,
aus der Werbung, etc.

„Greenwashing ist, wenn Unternehmen sich als umweltfreundlich und nachhaltig darstellen, ohne es wirklich zu sein. Sie nutzen ungenaue oder falsche oder übertriebene Aussagen. Sie machen Werbung, die bewusst einen besseren Eindruck macht. Die Kunden sollen denken, dass die Produkte und die Art, wie die Produkte hergestellt werden, umweltfreundlich und nachhaltig sind, damit die Kunden die Produkte kaufen.“

SUSTAINABILITY

WHAT IS THAT?

What does "sustainable" mean to you?

Have you ever heard that word before?

Do you know the word in other languages?

German „Nachhaltigkeit“,
French „Durabilité“,
Russian „устойность“,
Chinese “可持续性”,
Turkish “sürdürülebilirlik”

Why is this important?

Sustainability is important so that all people and nature are doing well, today and in the future.

Do you know any examples of sustainability?

Simple products from everyday life, behaviors, advertisements, etc.

“Greenwashing is when companies present themselves as environmentally friendly and sustainable without actually being so. They use inaccurate, false, or exaggerated claims and create advertising that gives a better impression on purpose. Customers are meant to believe that the products and the way they are made are environmentally friendly and sustainable, so they will buy them.”

SUSTAINABLE DEVELOPMENT GOALS



The SDGs are 17 goals designed to make the world a better place - for example, by reducing poverty, providing clean water, and offering education for all. All countries in the world want to work together to achieve these goals by 2030



Which four SDGs do you find most important?
Enter the numbers here.

=> There is no "right" or "wrong".

What do you think?
Which goals are related to plastic? Circle them!



CHECK WHAT IS TRUE:



All countries are participating in the SDGs.



The SDGs only apply to politicians, not to me.



Plastic has nothing to do with the SDGs.



Which SDGs align with the following statements?

Drinking water was tested
in many countries.
Microplastics were present
in 93% of the samples.

=> SDGs 3, 6,
13

=> SDGs 9, 11, 12, 13

Approximately 80-150 million tons
of plastic are floating in the
oceans, causing the deaths of
millions of fish, dolphins, turtles and
other marine life.

=> SDGs 6, 13, 14

Plastic is made from petroleum.
The manufacturing process produces a lot
of CO₂ - a gas that heats up the climate.
Approximately 4% of global CO₂ emissions
come from plastic production.

WHAT HAPPENS TO OUR



PLASTIC WASTE?

In Germany, each person produces **76** kg of plastic waste per year...

...more than half of it comes from packaging waste.

Phew, that's a lot.

On average, a plastic bag is used for no longer than **25** minutes.
What about you?

Why do we even separate our waste? Does it make a difference?

Yes definitely!

What percentage of plastic waste is recycled in Germany?

Approximately half.

Germany exports over 10% of its plastic waste abroad. Where to?

Approximately half of these went to Turkey, the Netherlands, Malaysia and Indonesia.

Abroad, our waste is often burned or stored in illegal landfills.

Search on YouTube or Google: GERMAN PLASTIC WASTE INDONESIA



And what about plastic in nature?

Where does most of your plastic waste
come from at home?

1

Plastic bags

2

Bottles, juices, cans

3

Snack packages



How can you change that? Write down
your ideas!



For example: reusable instead of disposable, shopping without packaging whenever possible, using cloth bags and steel cans instead of plastic bags and plastic containers, bar soap instead of liquid soap in disposable dispensers, wooden brushes instead of plastic brushes. Generally using things made of wood, glass and metal instead of plastic, etc.

DO YOU ACTUALLY KNOW

MICROPLASTICS?

Primary microplastics

e.g. in cosmetics, detergents, medicines and cleaning products



Secondary microplastics

e.g. through tire abrasion and the breakdown of plastic waste



There are two types of microplastics

Primary microplastics are intentionally produced. They are used, for example, in cosmetics as exfoliants or in manufacturing as plastic granules.

Secondary microplastics are created unintentionally through the breakdown of larger plastic items and through abrasion, for example from tires or when washing synthetic clothing, or also through the weathering of building materials.



SCAN ME

The Codecheck app tells you which cosmetic products contain microplastics and other harmful substances.

MATCH TOGETHER:

The following amount of microplastics per person enters the sewage system per year:



due to abrasion of the shoes

77 Grams



through waste disposal

303 Grams



due to tire abrasion

109 Grams



during washing

1.229 Grams

WTF!

Microplastics are not biodegradable and persist in the environment for a very long time. Many microplastic particles are so small that they can penetrate the blood-brain barrier and even enter the brain.

Microplastics are now ubiquitous. They have even been found in unborn babies.

How does microplastic get into our food (and drinks) in the first place?

Through the environment and food chain, through packaging, through kitchen utensils, through highly processed foods, and through the air and water.



Do you have any ideas on how to change that?

For example, use reusable containers instead of disposable ones, shop without packaging whenever possible, use li bags and steel cans instead of plastic bags and plastic containers, use wooden brushes instead of plastic brushes, wooden boards instead of plastic boards, generally use things made of wood, glass and metal instead of plastic, wash laundry less often, eat less fish and seafood, buy fewer processed foods and cook more yourself, drive less, etc.

PLASTIC

FOR WEARING?

What material are your pants, t-shirts, blouses, etc. made of? What happens when I wash them?

CHECK THE LABEL ON YOUR CLOTHES.

Where was it manufactured?

What material is it made of?

Think about it: where did you buy them?

Most clothes now contain plastic, called polyester.

These are synthetic fibers made from plastic. Harmful chemicals are used in the production of polyester. Microplastics are released when polyester is washed.

MICROPLASTICS ARE NOT THE ONLY PROBLEM...

HAVE YOU EVER HEARD OF FAST FASHION?

Fast fashion causes massive environmental damage through high water consumption, pesticides, microplastics, and CO2 emissions. Furthermore, it violates human rights.

THINK ABOUT IT!
WHAT DOES FAST FASHION MEAN AND WHY IS IT BAD?

People are harmed by exploitative working conditions, starvation wages, and unsafe working conditions in the producing countries. Overconsumption leads to extreme resource waste, as fashion trends in the clothing industry are often short-lived.

IS THIS FASHION? OR JUST TRASH?

SPOILER: BOTH!

Fast fashion is often poorly made. Poor quality equals short lifespan.

People in distant countries sew the clothes. They work very long hours and receive very little money. Often, the working conditions are poor.

On average, how often do you wear a piece of clothing?

And what about the environment?
Water consumption?
Chemicals?

Google it:
Accident at textile factory

Google it:
Fast Fashion Cemetery in Atacama

EIN PAAR FAKTEN...

ORDNE DIE ZAHLEN ZU:

10.000

_____ Liter Wasser
verbraucht die Produktion
einer Jeans.

Das sind ungefähr 60-70
Badewannen voller Wasser.

1.000

_____ Tonnen
Kleidung landen
jedes Jahr im Müll.

92 Mio

60.000

_____ Menschen sterben
jedes Jahr bei Unfällen in
Textilfabriken.

2,80

_____ Kilometer reist eine Jeans
von der Ernte der Baumwolle bis
zum Verkauf.

Das ist mehr als einmal um die Welt,
der Äquator ist rund 40.000 Km lang.

_____ US-Dollar
verdient eine
Näherin in Indien
am Tag.

A FEW FACTS...

MATCH THE NUMBERS:

10.000

92 MILLION

2,80

1.000

60.000

The production of one pair of jeans consumes _____ liters of water.

That's roughly 60-70 bathtubs full of water.

_____ people die every year in accidents at textile factories.



_____ tons of clothing end up in the trash every year.

A pair of jeans travels _____ kilometers from the cotton harvest to the point of sale.

That's more than once around the world; the equator is about 40,000 km long.

A seamstress in India earns _____ US dollars per day.

HOW COULD IT BE IMPROVED?

There are many solutions! Some are expensive, others are cheap, and you can find them both online and offline.

Slow Fashion!!



What ideas do you have for sustainable clothing consumption?

Tip: Google "swap party in your city"



Second-hand shops, flea markets, Vinted, etc., clothing swaps, repairs, donations (e.g., clothing banks, charity shops), and above all: buy less! Clothing made from renewable resources such as linen, hemp, wool, silk, viscose, Tencel, and lyocell. But be aware: other fabrics also have social and environmental drawbacks, although they are at least biodegradable. To ensure sustainability, look for labels such as GOTS or OEKO-TEX Standard 100!

WHAT FLOATS

ABOUT?

HOW PLASTIC GETS INTO THE OCEAN

Plastic waste breaks down into microparticles in the environment (air, oceans, and soil) due to sunlight and water. Microplastics in the air (for example, from tire abrasion or fibers from synthetic textiles) can settle on soil or enter the soil via rainwater. Tap water is contaminated by plastic pipes. Microplastics also enter water through cooking and washing, as well as through ingredients in cosmetics and toothpaste and in industrial production processes. These microparticles are so small that they cannot be completely filtered out in wastewater treatment plants. Sewage sludge is used as fertilizer. Thus, microplastics reach the sea via groundwater and waterways. Additionally, waste from ships and fishing vessels ends up in the ocean.

80%

Plastic waste in the ocean comes from land via wind, rivers and wastewater.

20%

It enters the sea via shipping, oil rigs, fish farming and similar industries.

OCEAN

MICROPLASTICS ARE NOT BIODEGRADABLE AND REMAIN IN NATURE FOR HUNDREDS OR EVEN THOUSANDS OF YEARS. TO THIS DAY, IT IS UNKNOWN WHETHER THEY WILL EVER DECOMPOSE AT ALL.

Did you know that plastic has even been found in the Mariana Trench at a depth of 11,000 meters?

DID YOU KNOW?

Many marine animals and birds eat plastic. This causes them internal injuries or they starve to death because their stomachs are full of plastic and there is no room left for real food.

Want to see pictures? Google "whale + plastic".

HOW BIG IS THE LARGEST PLASTIC ISLAND?

A) AS BIG AS COLOGNE

B) AS BIG AS GERMANY

C) AS LARGE AS CENTRAL EUROPE

HOW MANY YEARS DOES IT TAKE FOR PLASTIC TO DECOMPOSE IN THE OCEAN?

A) 50 YEARS

B) 100 YEARS

C) OVER 450 YEARS

HOW MUCH PLASTIC ENDS UP IN THE OCEAN EACH YEAR?

A) 19 MILLION TONS

B) 100 MILLION TONS

C) 50,000 TONS

What can we do about plastic in the water?



Avoid plastic waste!

Use fewer plastic items. Use alternatives to plastic.

WE'LL SOLVE THE PROBLEM

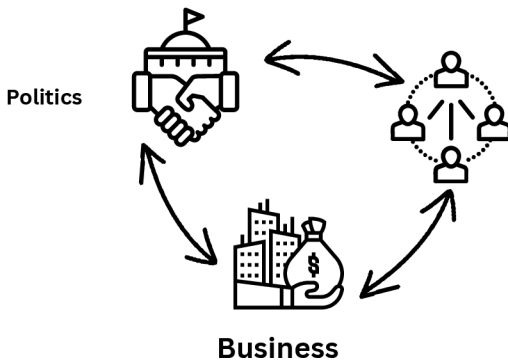


TOGETHER

It's not just us as individuals who can do something.

When politics and business do something, it has a very big impact.

But who has to start? Us? The politicians? Or the economy, i.e., corporations and companies?



Economy

IDEALLY, ALL TOGETHER!

Assign whether politics or economics can take on this task!

- | | |
|---|--------------------------|
| Could ban plastic bags in supermarkets? | <u>POLITICS</u> |
| Can produce products without plastic: | <u>ECONOMY, RESEARCH</u> |
| Can introduce rules for waste separation: | <u>POLITICS</u> |
| Can reuse packaging: | <u>US, THE ECONOMY</u> |
| Can reward companies that use little plastic: | <u>POLITICS</u> |

ACTION! FROM SMALL STEPS TO BIG CHANGES

We can all do something and reach a few or many people with it. What ideas do you have?

- I myself can change my lifestyle

- Together with others encourage and support
one another and inspire

- At school, at work, or in a club
Getting involved, informing oneself, exerting pressure

- In my city or town Writing letters, talking to politicians

- Throughout society Start petitions, voting, take action,
to create change

Some methods are very effective, some are not. What are your big points, your biggest successes with these ideas?



FOOTPRINT



HANDPRINT

Everything we do and consume leaves traces, both negative and positive. We call these traces HANDPRINTS and FOOTPRINTS. Ever heard of them?

YOUR FOOTPRINT

Consumption, usage, etc. Write down 3 things:

buying fast fashion clothes

using more electric energy than necessary

using single use plastic

YOUR HANDPRINT

Your positive influence: Write down 3 things:

recycling and avoiding plastic

using public transport, cycling

choosing local and seasonal food

To make the world a better place, we need two things:

We need to reduce our footprint. That means:
Do fewer things that harm the environment.

We need to make our handprint bigger. That means:
Increase our positive influence.



GROW YOUR HANDPRINT

HOW CAN YOU DO THAT?

There are a thousand ways, from very small to very large. I can become active on Instagram, sign petitions, inform friends and family, write emails to politicians, get involved in an association, etc., etc. But normally we start with ourselves.

Think together:

What can you do to increase your footprint on plastic
and sustainability?

Plan an event!

What is your
goal?



Who should
participate?



When and
where are you
holding the
event?



What could
help you?



SPACE FOR YOUR THOUGHTS



What is most important to you?

What did you learn and how can you implement it in your everyday life to live more sustainably?

Challenge:
A day completely without
plastic waste (but you still go
shopping)!

Challenge:

Challenge:
A day completely without
plastic waste (but you still go
shopping)!

Challenge:

Go to a secondhand shop with
your loved ones. Who can find
the best clothes **WITHOUT**
plastic [= polyester, nylon, etc.]?

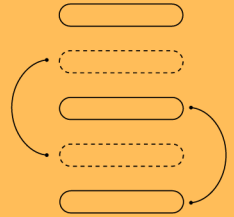
More tips? More information? More ideas? Scan the QR code and check
out our website for the magazine!

Let yourself be inspired - you can achieve more than you think!



LESS PLASTIC, MORE FUTURE

A WORKBOOK ON PLASTIC AND SUSTAINABILITY



THE GREEN AGENTS NETWORK...
...CONSISTS OF OVER 25 INDIVIDUALS AND ASSOCIATIONS FROM
COLOGNE AND THE SURROUNDING AREA. AMONG OTHER
THINGS, WE OFFER LOW-THRESHOLD AND MULTILINGUAL
WORKSHOPS AND EDUCATIONAL PROGRAMS ON THE TOPICS OF
ENVIRONMENT, SUSTAINABILITY, AND CLIMATE.

EDITOR:
MIGRAFRICA GMBH PROJECT GREEN
AGENTS NETWORK GOEBENSTR. 10-12
50672 COLOGNE

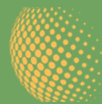
IN COOPERATION WITH:
MERKUR - ASSOCIATION FOR MEDIA
CULTURE E.V.

CONTACT:
GREENAGENTS@MIGRAFRICA.ORG
WEBSITE:

WWW.GREENAGENTS.DE
PROJECT MANAGEMENT:

ADRIAN KOHLERT
TEXT & CONCEPT:
LYRA HAUFSCHILD, NICOLIN GABRYSCH,
CHARLOTTE RITTER, ADRIAN KOHLERT
DESIGN & LAYOUT:
LYRA HAUFSCHILD, CHARLOTTE RITTER,
K.-ROMAN ASLAN

FOLLOW US ON
INSTAGRAM



Merkur-
Verein für
Medienkultur e.V.
Seit 2022

GEFÖRDERT DURCH DIE



Stiftung Umwelt
und Entwicklung
Nordrhein-Westfalen

Gefördert durch



Stadt Köln

LICENSE FOR USE: CC BY-SA 4.0

This material may be shared and adapted. Copyright and rights information must be provided, a link to the license must be included, and it must be indicated whether any changes have been made. Further use is only permitted under the same license.

DISCLAIMER:

Despite careful review of the content, we assume no liability for the content of external links. The operators of the linked websites are solely responsible for their content.

July 10, 2025