

Student Handbook Sustainability

Practical Tips and Strategies
for Reducing your Ecological Footprint
and Promoting a Greener Future

Hi, I'm **IRIS**, the IGC's
sustainability mascot. My
name means "rainbow" in
greek, referencing the beauty
and diversity of our world!



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Chapter 1

PREFACE



Hello and welcome to the first edition of IGC's Sustainability Student Handbook!

As we move further into the 21st century, we are faced with a rapidly changing world that presents a range of complex and interconnected challenges. One of the most pressing of these challenges is the need to achieve sustainability - a goal that requires us to balance economic, social, and environmental considerations in all of our actions and decisions.

In this endeavor, we would like to express profound gratitude to our former Dean, Tim Goydke, whose unwavering commitment not only initiated this project but also shaped its very essence. Tim's profound contributions, which encompassed not only the initiation but also the composition of the majority of the text and the meticulous design of this handbook, have been truly instrumental.

Environmental and social sustainability begins with the habits and behavior of each individual. Whatever we do, our actions have an effect on our environment. Each of us can do something to reduce this effect and create conditions for a healthy and just environment.

We are happy that you are here to join in our united approach to making a difference in our community, our lives, and most importantly, our beautiful world! As students, you have a critical role to play in shaping the future of our planet. By developing your knowledge, skills, and attitudes in relation to sustainability, you can become agents of positive change! It doesn't matter who we are and where we are. It is up to all of us to take a critical look at our lifestyle and habits.

This book will hopefully give you some practical tips and information on what can be done throughout academic and daily life as we aim to act and live more sustainably.

Students from MTM, EAM and MGM have contributed to this handbook as part of their project work in their course on "Business Ethics and Sustainability". Their dedication and passion for sustainability have been instrumental in bringing this project to fruition.

The handbook is a living project and will be updated regularly. Any suggestion on what is missing or should be changed or updated is highly appreciated! To ensure the longevity and sustainability of this handbook, please return it to your program coordinator or IGC staff upon completion of your studies at IGC.

Bremen, September 2023

The Board of Directors



Meet our Campus Sustainability Coordinator Sara Franzeck!

We are thrilled to introduce Sara, our Campus Sustainability Coordinator at the IGC. With a profound passion for environmental stewardship and a wealth of experience in sustainable initiatives, Sara brings a dynamic and innovative approach to our commitment to a greener and more sustainable future. Sara's journey in sustainability began with a fervent dedication to addressing the pressing challenges our planet faces. Sara is poised to steer the IGC towards a more eco-conscious path, fostering a culture of responsible consumption, renewable practices, and heightened awareness throughout our campus community. Sara's expertise extends beyond traditional sustainability measures, encompassing a holistic understanding of how sustainable practices intersect with academia and business. She aims to inspire our students, faculty, and staff alike to embrace sustainability not merely as a responsibility, but as an opportunity for positive transformation.



If you have any inquiries, suggestions or criticism, do not hesitate to contact Sara!

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Who Cares*

7 questions about the future for Sara Franzeck

This is what I look forward to when I think about the future:

Watching our family's children grow up and being a part of their development.

I have these wishes for my future:

For these children and everyone else, I wish that they live in a world in which people have understood that happiness does not result from consumption and we have established a form of economic activity that is fit for survival and respects the limits of nature.

That worries me:

The helplessness and inaction in the face of the recognizable climate catastrophe and the loss of biodiversity. We are destroying such a finely balanced natural system from which we humans have benefited greatly. I also worry about authoritarian, anti-democratic tendencies in Europe.

I think that's what the world needs in these times:

Trend-setting political decisions, encouraged by civil society commitment, especially from the universities.

My concrete intention:

Not giving up my commitment to sustainable change and not being discouraged by the persistent forces of the old system.

When I lose my inner balance, that helps me:

Conversations with friends and sports

If I were 21 now, I would:

With the insights from a quarter of a century of life experience, I would put a little more perseverance in exploiting my talents. And continue to make sure that my activities represent added value for society.

* Series of topics at the university with the aim of providing impulses, promoting exchange and looking for new ways.

SUSTAINABILITY BASICS

Chapter 2

We know that the term “Sustainability” gets thrown around a lot, but what does it actually mean?



CREATING A SUSTAINABLE FUTURE: BALANCING ECONOMY, SOCIETY, AND THE ENVIRONMENT



Sustainability refers to meeting the needs of the present without compromising the ability of future generations to meet their own needs!

Sustainability is a rapidly evolving concept that seeks to strike a **balance between economic, social, and environmental concerns.**

At its core, sustainability is about creating a better future for all, one that is characterized by **prosperity, social justice, and ecological integrity.** It recognizes that human well-being is closely linked to the **health of the planet** and that our actions have the power to either support or undermine the systems that sustain life on Earth.

The concept of sustainability can be traced back to the early 20th century. In the 1980s, it gained traction with the publication of the **Brundtland Report** by the United Nations. Since then, it has continued to evolve, with a growing emphasis on climate change, biodiversity loss, social inequality, and economic instability.

These challenges are driven by a range of factors, including economic development and **unsustainable consumption patterns.**



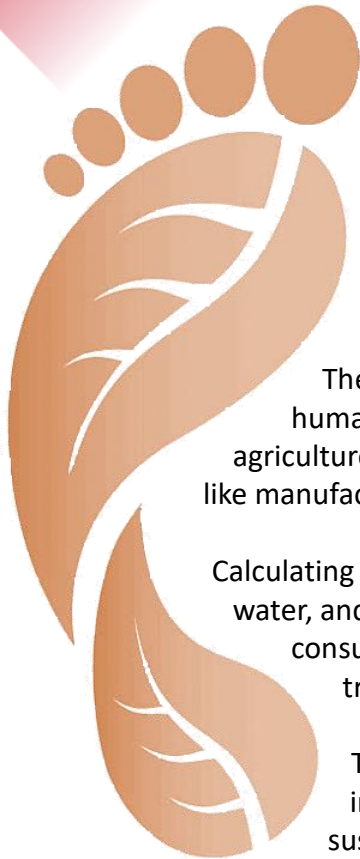
SUSTAINABLE DEVELOPMENT GOALS (SDG)

The SDGs are a set of **17 goals** adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. The process of implementing the SDGs involves a multi-stakeholder approach that includes governments, civil society organizations, the private sector, and individuals. Students can implement the SDGs by taking actions that align with the targets and principles outlined in each goal, e.g. educate themselves and others, incorporate sustainable practices into their daily routines, advocate for change, or participate in sustainability-focused extracurricular activities.

*"The world is changed by your example,
not by your opinion."*

Paulo Coelho
Brazilian Lyricist & Novelist

ECOLOGICAL FOOTPRINT



The ecological footprint is a measure of how much land, water, and other resources are required to sustain human activities and lifestyles. It is a way of assessing **the impact of human activity on the environment**, and it can be used to compare the sustainability of different lifestyles, communities, and countries.

The ecological footprint includes both the **direct and indirect impact** of human activities on the environment. Direct impacts include activities like agriculture, forestry, and construction, while indirect impacts include activities like manufacturing, transportation, and energy production.

Calculating the ecological footprint involves measuring the amount of land, water, and other resources that are required to produce the goods and services consumed by humans. This includes everything from food and clothing to transportation and housing.

The ecological footprint is an important tool for understanding the impact of human activities on the environment and for developing sustainable practices that can reduce this impact. By measuring and reducing our ecological footprint, we can help to ensure that future generations will have access to the resources they need to live healthy and fulfilling lives.

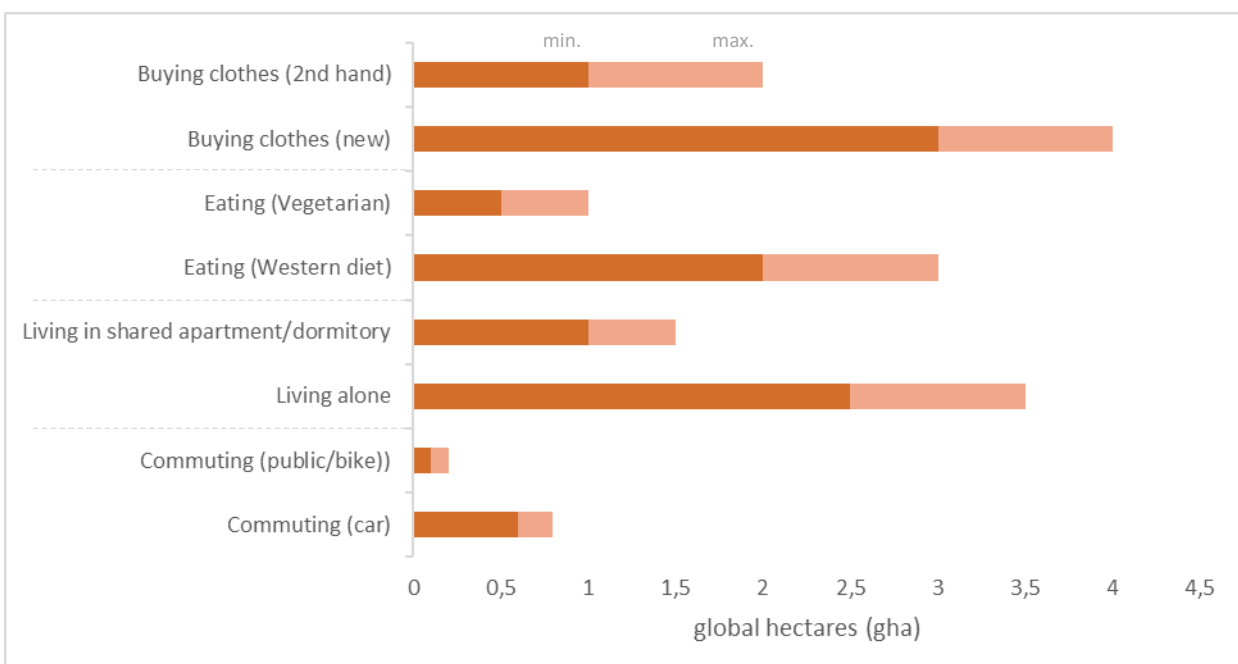


Calculate your individual footprint at:
<https://footprint.wwf.org.uk/>

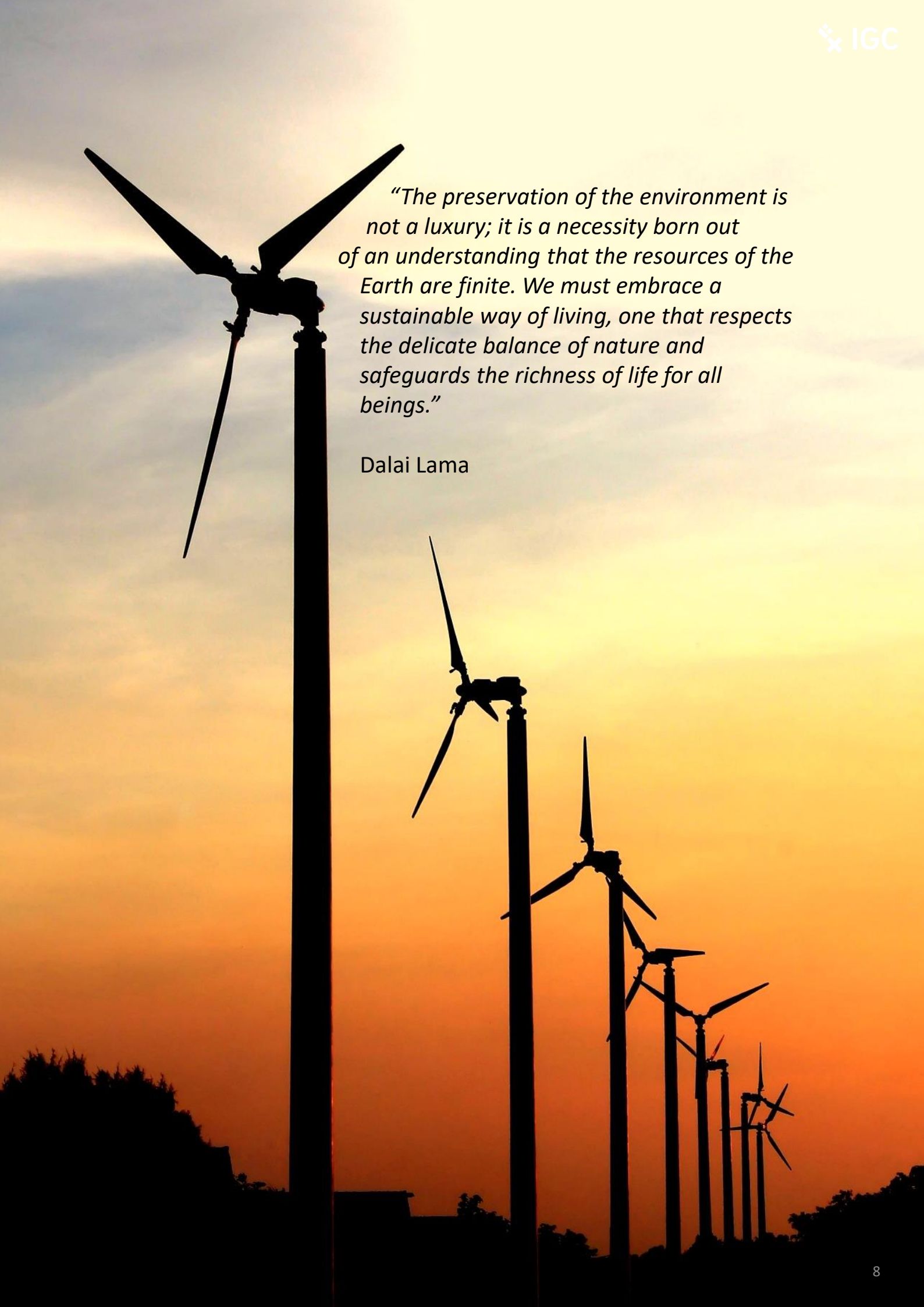


When measuring the ecological footprint, there are two common metrics, the **Global Hectares (gha)**, measuring the demand placed on ecosystems by human activities, and **CO₂e** (carbon dioxide equivalent), used to measure greenhouse gas emissions.

EXAMPLES OF ECOLOGICAL FOOTPRINT FOR TYPICAL STUDENT'S ACTIVITIES*



* Individual ecological footprints can vary widely depending on specific circumstances and individual choices.

A series of wind turbines are silhouetted against a vibrant sunset sky, transitioning from orange to yellow. The turbines are arranged in a line, receding into the distance. The largest turbine is on the left, and several smaller ones follow towards the right. The sky is filled with soft, wispy clouds, and the overall mood is serene and hopeful.

“The preservation of the environment is not a luxury; it is a necessity born out of an understanding that the resources of the Earth are finite. We must embrace a sustainable way of living, one that respects the delicate balance of nature and safeguards the richness of life for all beings.”

Dalai Lama

CAMPUS LIFE

Chapter 3



**Embrace sustainability for a
campus life that's both
eco-friendly and
extraordinary!**

HOW YOU CAN MAKE A DIFFERENCE ON CAMPUS

As students, you have the power to influence change, and by incorporating sustainable practices into your daily routines, you can make a significant difference. Here are some ideas that can be easily implemented on campus:



Turn off and unplug all **appliances** while not in use



Turn off **lights** and close the **shades** when you leave the classroom



To save **paper**, keep all scratch paper you can get your hands on and re-use it



Use **double-sided printing** if printing is absolutely necessary



Preview your documents to eliminate extra white space and dangling sentences, and make sure you're not printing more pages than necessary.



Consider taking **electronic notes** on your laptop instead of using paper notebooks.



Avoid printing lecture handouts and instead take electronic notes on PDFs.



Submit papers and assignments electronically whenever possible.



Phantom Loads

refer to the electricity consumed by electronic devices when they are not actively in use but are still plugged in. According to the International Energy Agency (IEA), standby power consumption accounts for around **5-10% of household electricity** use in developed countries.



Write on **whiteboards** instead of flipchart paper



Drink **tap water** (its high quality in Bremen) instead of bottled water



Save water by using the **dual-flush function** (little button for little flush) available on all IGC toilets

0.3 Kilo

is the ecological footprint equivalent of reading a 20-pages article online instead of printing, making up 1.87 kg

*“Every person is the right person to act.
Every moment is the right moment to begin.”*

Johnathan Schell

American Author, Journalist & Peace Activist

EASY WAYS TO SAVE ENERGY AND RESOURCES ALL YEAR ROUND



In Winter:



Wear **multiple layers of clothes** instead of one thick winter jacket



Bring a **thermos mug** with hot tea (hot water can be refilled at the pantries)



Keep **doors** and **windows** closed and only air with windows fully open for 5 minutes every 20 minutes



In Summer:



Open **windows** early in the morning to cool the air inside the classroom and leave them fully open for a short time (5-15 min) instead of partially ventilating the whole day



Use **natural light** wherever possible, open the curtains rather than turning on the lights

1.17 KWh

per day per person can be saved if you climb the stairs instead of taking the lift

These actions contribute to:



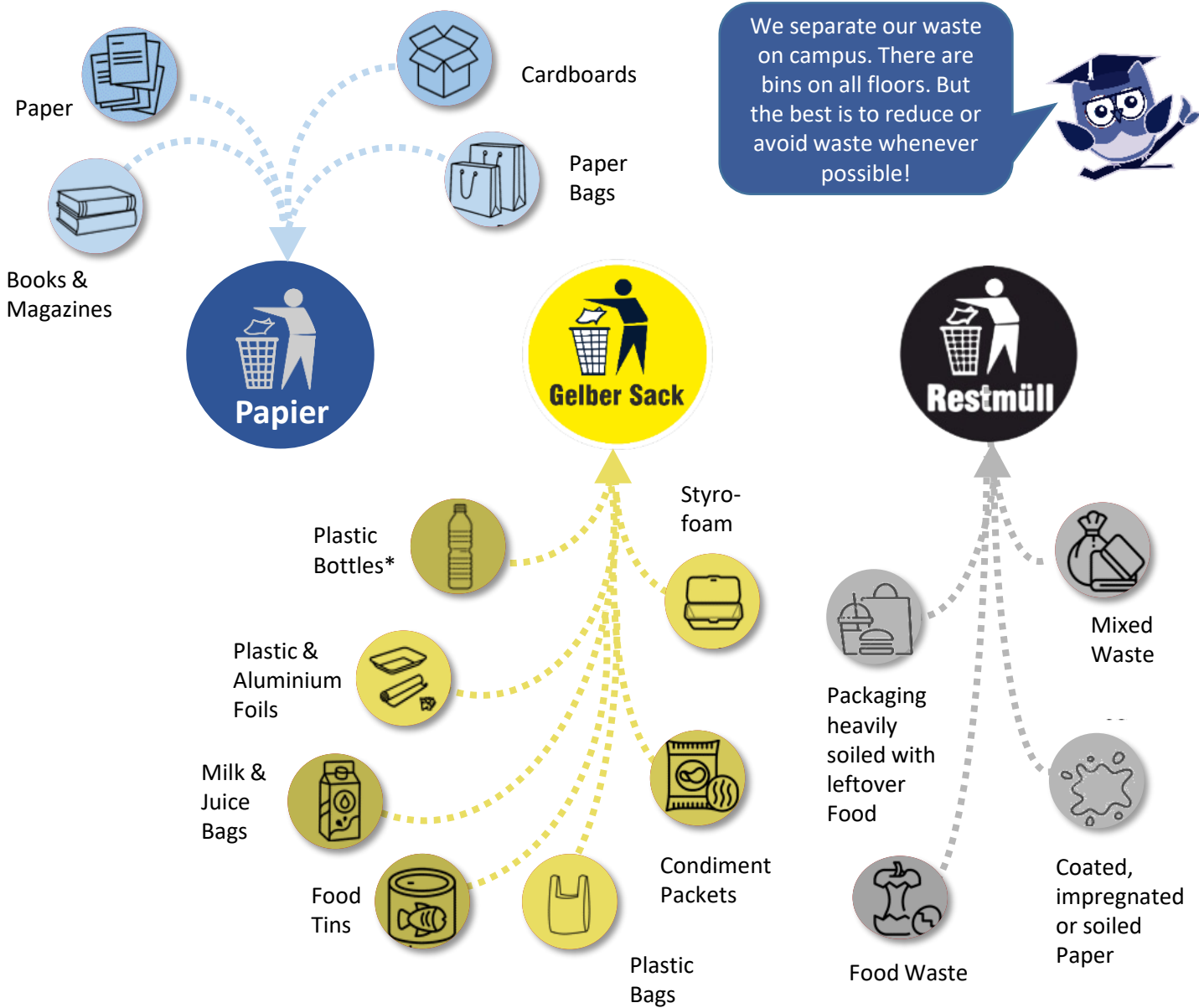
SUSTAINABLE DEVELOPMENT GOALS

5 Kilo

of waste per year and consumer could be avoided if no bottled water would be bought any longer



WASTE MANAGEMENT



We separate our waste on campus. There are bins on all floors. But the best is to reduce or avoid waste whenever possible!



Think it can be recycled?
Check our A-Z for other types of waste.



* In Germany, you pay a deposit (Pfand) of 0.08-0.25€ for almost all drink bottles and cans. When you return the empty item to the shop, you get your deposit back. Check p. 18 for more information.

UNLEASH THE POWER OF SUSTAINABLE IT PRACTICES

Did you know

that approximately 30% of the energy consumed by PCs is wasted when they are left on but not in use?

Energy Efficiency

Optimize energy consumption by turning off computers, monitors, and other IT devices when not in use. Adjust power settings to enable sleep or hibernation modes. Utilize natural lighting and adjust screen brightness to save energy.

E-Mail Communication

Globally, over 340 billion E-Mails are sent every day, and the number and size of E-Mails have an environmental impact due to the energy consumed in data storage. Regularly clean up your email folders by deleting unnecessary emails, removing attachments, and emptying the deleted items folder.

Cloud Storage and Data Management

Utilize cloud storage solutions to reduce the need for physical data storage devices. Regularly clean up and organize digital files to optimize storage space.

Sustainable Software Practices

Opt for software applications that prioritize energy efficiency and resource optimization. Consider using open-source software that promotes transparency, collaboration, and innovation.

E-Waste

It's worth noting that 75% of the total environmental impact of a PC occurs during the production process. When buying a new computer, choose a **sustainable laptop**. More and more companies offer new series (e.g. the Acer Aspire Vero series) that use recycled plastics, compostable packaging, and generally try to minimize the ecological footprint in production.

And finally, properly dispose of electronic waste by recycling old or unused IT equipment. Consider donating functional IT devices to organizations in need.

SUSTAINABLE DEVELOPMENT GOALS

How you can engage with the SDGs on Campus:

- Join or start a student group focused on sustainability and the SDGs that meets regularly to discuss and take action.
- Participate in events and campaigns organized by existing student groups or the IGC, such as Earth Day celebrations, clean-up days, and sustainability fairs.
- Incorporate sustainability into your academic work. Many academic programs and courses incorporate sustainability and the SDGs into their curricula.
- Practice sustainable behaviors on campus, e.g. by reducing energy use, using reusable water bottles, and recycling.
- Advocate for sustainability and the SDGs on campus, e.g. by speaking with fellow students, faculty, and staff about the importance of these issues and urging them to take action.

“The path to sustainability requires a profound shift in mindset, from one of consumption and exploitation to one of reverence and stewardship. We have the knowledge and the capacity to create a world that thrives in harmony with nature; now, we must summon the will to make it a reality.”

Vandana Shiva



Contribute to sustainability at home by practicing energy conservation, waste reduction, through conscious consumption and the adoption of eco-friendly habits







HOUSING

Chapter 4





THE POWER OF CONSERVATION

SAVING WATER

-  Don't leave the **tap** running, use a bowl when washing fruits, vegetables & dishes
-  Drink tap water (its high quality in Bremen) instead of bottled water
-  Use the **shower** instead of the bath and use a timer (5 minutes will do)
-  **Reuse** water for landscape gardening
-  Use energy-efficient, water-saving devices (e.g. low-flow showerhead and faucet aerators)
-  Fix **leaky faucets and toilets** as soon as possible

SAVING ENERGY

-  When boiling the **kettle**, use only the water you need, or put it in a thermos for later
-  Make a large pot of coffee and **share** with your roommates rather than brewing only a single cup










Radiator Thermostats

at your heatings normally have a scale from 1 to 5. Instead of a 0 there is an asterisk (equivalent to appr. 5 °C, as a frost protection setting). The digits correspond to a specific temperature each. Basically, the heating does not have to be at the same level in every room. The following settings are recommended:

- Bedroom & kitchen: 16-18 °C, corresponds to level 2-3
- Bath: 24-26 °C, equivalent to level 4-5
- Living room: 20-22 °C, corresponds to level 3-4

Share your energy-saving challenges on social media with the hashtag **#myenergychallenge** and nominate friends, flatmates, and followers to join



-  Switch off all **lights** when leaving any room
-  Make the most of **natural Light** and use **LED** lighting/energy saving bulbs
-  Keep **windows** closed whilst heater is running and close the door to keep the heat inside
-  Turn off your **boiler** and set the radiator **thermostats** to * if no one is around for a longer time, e.g. on weekends or during breaks
-  Turn down the **washing machine** temperature to 30° Celsius (modern detergents work well with low temperature) and wash only full loads
-  **Air dry** your clothes instead of using a dryer
-  Reduce **hair dryer** usage or thoroughly towel dry your hair before use: good for your hair and for the environment!

6%

on your heating costs can be saved by reducing the temperature in your room by just one degree!

COOKING UP SUSTAINABILITY: HOW YOUR KITCHEN CAN HELP TO SAVE THE PLANET!

Bring the SDG into your Kitchen!

2 ZERO HUNGER
Help to feed everyone by reducing food waste, donating excess food, and sharing meals with others.

3 GOOD HEALTH AND WELL-BEING
Promote healthy eating habits, e.g. by choosing organic fruits and vegetables, and reduce food waste, e.g. by using leftovers creatively.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Reduce the environmental impact of food production, distribution, and consumption by minimizing waste and using resources more efficiently.

13 CLIMATE ACTION
Help to reduce our carbon footprint, e.g. by using energy-efficient appliances and choosing low-carbon foods.

TIPS IN THE KITCHEN



Unplug kitchen equipment when not in use e.g. Microwaves & Coffee Machines



Use dishwasher once load is full



Cook with the lid on (Keep heat inside to help cook food faster)



If available, use a microwave instead of an oven.



Turn your stove and oven off when food is almost done and use the remaining heat to finish cooking food. Leave the door open when finished to warm the house



There are several houseplants that are effective in cleaning indoor air by removing harmful pollutants and toxins, e.g. Snake Plant (DE: Bogenhanf), Boston Fern (DE: Schwertfarn), or Golden Pothos (DE: Goldene Efeutute)

20%

less electricity is needed if you do not preheat the oven!

Host TV nights with friends or flatmates to save on individual energy consumption or cook with others to reduce appliance usage and make the experience more enjoyable!



Staples such as vinegar, baking soda, hydrogen peroxide, and essential oils come in handy as we concoct our own simple all-purpose cleaners. The good thing about these is that they are gentle on the skin, and the environment.

Bathroom Cleaner

500 ml lukewarm water
50 g citric acid
1 tsp liquid soap
5-10 drops of an essential oil for even more cleaning (e.g. tea tree, lavender, orange or other citrus scents)
Combine in a spray bottle, and use to clean hard surfaces such as countertops, sinks, etc.

Dishwashing Liquid

20 g finely grate rams of curd soap
200 ml hot water
1 tbsp baking soda

Dissolve the soap in the water and add the baking soda

Laundry Detergent

150g washing soda ("pure soda")
150g baking soda
100g curd soap
120g citric acid

To brighten whites add white vinegar

How much plastic do we want to wear on our skin?

How much microplastic do we want to flush down the drain and bring into the world?

How much waste do we want to produce with the textiles we have at home?

Plastic

has revolutionized modern life but comes at a cost to the environment. Plastic pollution is a growing problem, with plastic waste found in oceans, rivers, and landfills worldwide.

One of the most concerning aspects of plastic pollution is the prevalence of microplastics, which comes from a variety of sources, including the breakdown of larger plastic items, industrial processes, and personal care products.

The impact of microplastics on the environment is significant. They can be ingested by a wide range of marine and terrestrial organisms, from small plankton to large mammals. Microplastics can absorb and transport toxins, such as pesticides and heavy metals, which can accumulate in the tissues of organisms that ingest them.

In addition to their environmental impacts, microplastics can also have human health implications. Studies have shown that microplastics have been found in human tissue, including the placenta, and can potentially lead to inflammation, oxidative stress, and other health problems.

The most important approach to address the problem is to reduce our overall use of plastics and find alternatives to single-use items. Another is to properly dispose of plastic waste, through recycling or other methods.

75%

of tap water samples collected in 2017 in Europe contained plastic



Did you now, that...

- **microparticles** migrate from bottles into the liquid, especially when the bottle is exposed to heat or when it is reused. Many plastic bottles also contains Bisphenol A (BPA), which can be harmful to humans. **SOLUTION: CHOOSE A BPA-FREE OR EVEN BETTER A STAINLESS STEEL DRINKING BOTTLE**, check e.g. www.flaschenscout.de
- in **fleece fabrics**, the individual fibers are particularly loosely connected. They are easily detached and end up in house dust.
- **mattresses, bedding & co.** are unfortunately mostly 100% synthetic these days. How many hours, days, years of your life do you spend in bed?

Here are some tips and tricks for living a plastic-free lifestyle:



- **Bring your own bags:** Always bring reusable cloth bags when shopping.
- **Avoid single-use plastic packaging:** Opt for products that come in glass jars or paper packaging rather than plastic.
- **Bring your own containers:** Bring your meal in own containers or use them for takeout or leftovers.
- **Choose plastic-free personal care items:** Look for shampoo bars, toothpaste tablets and bamboo toothbrushes that are packaged without plastic.
- **Avoid plastic wrap:** Use beeswax wrap or reusable silicone food storage bags.

REDUCE, REUSE, AND RECYCLE FOR A SUSTAINABLE FUTURE



Traditionally, our society has followed a linear model in resource management and usage, where natural resources are extracted, transformed into products, and then disposed of after use. However, due to growing concerns about sustainability, there is now a shift towards a “**circular economy**”.

In a circular economy, products are utilized to their fullest potential and are then repaired, resold, recycled, or redistributed within the system, reducing waste and promoting a more sustainable approach. This approach is increasingly being applied not only to items like water bottles, coffee mugs, and produce bags but also to clothing, furniture, and technology. By reusing or passing on these items, we can conserve energy and materials that would otherwise be used to produce new products.

REUSE & UPCYCLING

Upcycling and do-it-yourself (DIY) projects can give old items a new life and reduce waste:

- At **Möbellager Nord** (www.moebellagernord.de), run by the employment and education provider “alz”, which tries to integrate long-term unemployed people into the labor market, refurbished furniture and furnishings from donations and household liquidations are offered.
- www.nut-und-falz.de is a **DIY blog** from “alz” that show you how you can conjure up beautiful things for your home and garden with simple tools and a little manual skill.

By fostering a more creative approach to consumption and breaking free from our throwaway culture, we can make a significant contribution to promoting sustainable lifestyles!



SHARING

Explore options for borrowing, lending, leasing, and sharing goods and services:

- At www.tauschticket.de you can exchange your items with other members. You need so-called tickets and sufficient exchange credit.
- The app www.stuffle.com works like a mobile flea market: Under the motto "Make new from old" you can browse for little treasures and of course offer something yourself.
- **TauschWatt** (www.tauschwatt-bremen.de) in Bremen Neustadt includes about 120 people of all ages, who **exchange their skills (services) and items** with each other.
- www.bremen-tauscht.org is a **barter community** whose members exchange practical help based on time accounts.
- www.schwarzesbrett.bremen.de is a good place to find jobs, housing, and second hand items.

Every Sunday from 8 a.m. to 2 p.m. there is a **flea market** on the Bürgerweide directly behind Bremen Central Station. In winter and during events on the Bürgerweide, it is moved to Hansa Carré shopping center in Bremen-Hastedt (www.bremen.de/leben-in-bremen/shopping/flohmaerkte-in-bremen).

Papier

Glas

Kunststoffe
Dosen

Restmüll

USE LESS, RECYCLE THE REST

RECYCLING

A large part of the waste generated in Germany is reused and composted. Germany is even set to become the world champion of waste separation.

In Bremen, households typically have four separate bins located in their backyard for waste disposal. The disposal schedule can be found in the → [waste calendar](#).



Each bin has specific guidelines for the type of waste that can be disposed of in it:



The **yellow bin** is designated for lightweight packaging, such as plastic bags, aluminum foil, tins, Tetra-packs, and plastic bottles.



The **blue bin** is intended for paper waste and cardboard products, including newspapers, catalogs, writing paper, and paper bags. If you don't have a paper bin, you can leave a handy bundle by the road on collection day.



The **black or gray bin** is meant for residual household waste that cannot be recycled, such as hygiene articles, dirty packaging, damaged shoes or utensils, and cigarette butts.



The **brown bin** is designated for compostable kitchen and garden waste, including fruit and vegetable remains, eggshells, and leaves.



Glass bottles without a "Pfand" label (such as wine, cooking oil, sauces, marmalades) and jars without lids should be placed in specific **containers**, which are located at public spaces and are typically designated for white glass, brown glass, or stained glass (blue or green) and should only be used for hollow glass, not flat glass such as mirrors or window panes.



Check here for the nearest place:



The "Pfand" system is a big part of sorting your trash in Germany. This system requires a deposit between 0.08€ and 0.25€, depending on the container type, and between 0.75€ and 1.50€ for bottle crates.

Bottles with these logos have a deposit

Sometimes, it's embossed on the bottle



Most supermarkets have "Pfandautomaten" (bottle return machines), which also have a hole at the bottom for bottle crates. Any business selling Pfand containers must accept returns of such containers, but they need not accept container types that they do not sell. For instance, Aldi and Lidl sell only single-use bottles, so they do not accept multiple-use bottles. However, if a store is larger than 200 m², it must accept containers from all brands, regardless of the brands it sells.



Some people collect empty bottles as a means of earning money, and leaving your bottle next to a public trash can or in an attached tray can make their job easier, eliminating the need to search inside the bin for your bottle.

Chapter 5

EATING

Nourish your body, nurture
the planet



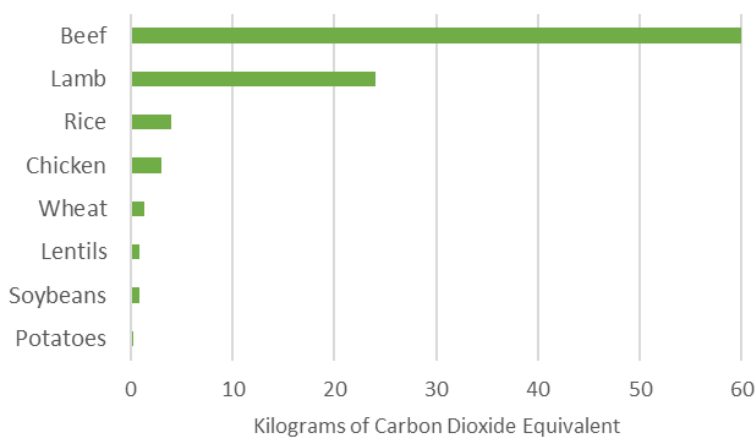
Go Green with Your Plate

Sustainable eating involves making conscious choices that reduce our impact on the environment and promote the well-being of our planet. Two key elements of sustainable eating are eating less meat and avoiding waste.

Reducing meat consumption is a crucial step towards sustainability, as animal agriculture has a significant impact on greenhouse gas emissions and land use. By incorporating more plant-based meals into our diets, we can reduce our carbon footprint and promote biodiversity. We can also support local farmers and prioritize sustainable and humane animal agriculture practices.

Avoiding waste is another essential aspect of sustainable eating. Food waste not only contributes to greenhouse gas emissions but also wastes precious resources such as water, land, and energy. By planning meals, buying only what we need, and using up leftovers, we can reduce food waste and save money.

Ecological Footprint of Food Production



You can promote sustainable eating by participating in sustainable food initiatives on campus, such as organizing a farmer's market or campus gardening.



Tips and tricks for sustainable eating



Plan meals and shopping: Before going for grocery shopping, plan your meals for the week and create a shopping list based on what you need. Stick to the list and avoid buying more than what you need.



Store food properly: Store perishable foods like fruits, vegetables, and dairy products in the refrigerator to extend their shelf life. Use airtight containers or wrap to prevent air exposure and spoilage.



Repurpose leftovers: Instead of throwing away leftover food, use it for future meals or snacks. For example, use leftover vegetables to make a soup or salad, or use leftover chicken to make a sandwich.



Support local food recovery programs: Support local food recovery programs (e.g. www.bremertafel.de) that collect unused food from restaurants, grocery stores, and other businesses and distribute it to those in need.

73%

of an individual's carbon footprint from food could be reduced by cutting meat and dairy products from our diets

Here are three easy-to-make recipes that are sustainable and use eco-friendly ingredients:

Chickpea Salad Sandwich

- Drain and rinse a can of chickpeas (~240g) and mash them in a bowl.
- Add 1/4 cup (~30g) of chopped celery, 1/4 cup of chopped red onion, and 1/4 cup of chopped carrot to the bowl.
- Mix in 1 tablespoon of lemon juice, 1 tablespoon of olive oil, and a pinch of salt and pepper.
- Serve the chickpea salad on bread or in a wrap.

Lentil Soup

- Heat 1 tablespoon of olive oil in a pot over medium heat.
- Add 1 chopped onion and 2 chopped carrots to the pot and sauté for 5 minutes.
- Add 2 cloves of minced garlic and cook for an additional minute.
- Pour in 4 cups (~1 l) of vegetable broth and 1 cup (~30g) of dried lentils.
- Bring the soup to a boil, then reduce the heat and simmer for 20-25 minutes, or until the lentils are tender.
- Season with salt, pepper, and herbs of your choice.

Vegetable Stir-Fry

- Heat 1 tablespoon of oil in a pan over medium-high heat.
- Add chopped vegetables of your choice, such as broccoli, bell peppers, carrots, and mushrooms, to the pan.
- Stir-fry for 5-7 minutes, or until the vegetables are tender-crisp.
- In a small bowl, mix together 1 tablespoon of soy sauce, 1 tablespoon of honey, and 1 teaspoon of grated ginger.
- Pour the sauce over the vegetables and stir to coat.
- Serve the stir-fry over rice or noodles.

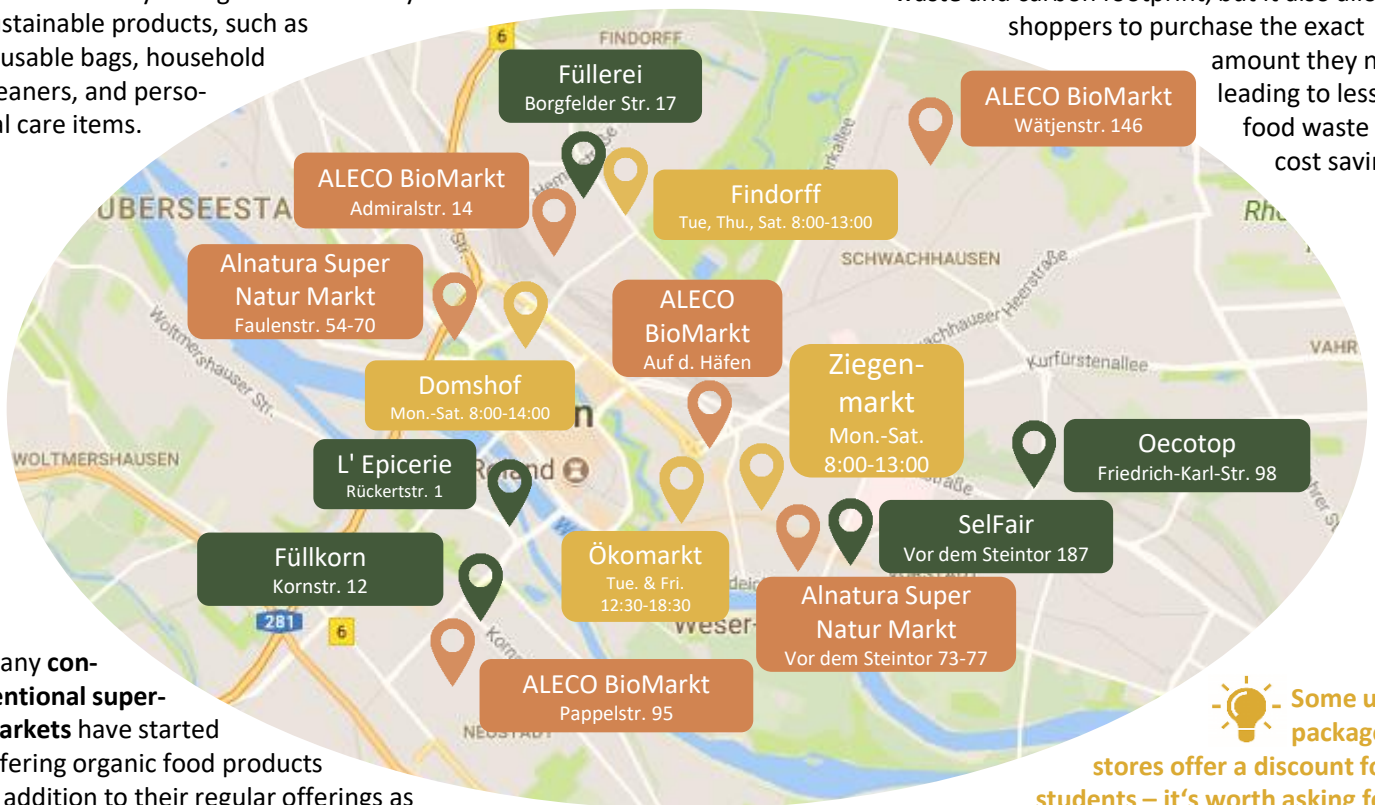
How to Shop Smart for Sustainable Food

Organic supermarkets

offer a wide selection of organic, and natural foods and products. These stores prioritize sourcing products from certified organic farmers and producers who use sustainable and environmentally-friendly methods of farming and production. In an organic supermarket, you can find a variety of fresh produce, meat and poultry, dairy products, and packaged goods that are free from synthetic pesticides, hormones, antibiotics, and other harmful additives. These stores often also carry a range of eco-friendly and sustainable products, such as reusable bags, household cleaners, and personal care items.

Unpackaged stores

are a type of retail outlet that focuses on reducing waste and promoting sustainable shopping practices. Unlike traditional stores, which package and wrap their products in plastic and other materials, unpackaged stores offer items in bulk, without any excess packaging. In these stores, you bring your own containers or purchase reusable containers in-store to fill with the desired quantity of product, such as grains, nuts, spices, and household cleaning products. This approach not only helps to reduce waste and carbon footprint, but it also allows shoppers to purchase the exact amount they need, leading to less food waste and cost savings.



Many conventional supermarkets have started offering organic food products in addition to their regular offerings as well. You can recognize organic food by a number of labels that indicate that a food product has been produced using organic and sustainable farming methods:



Some unpackaged stores offer a discount for students – it's worth asking for it!

Wochenmärkte (weekly markets)


are open-air markets which offer a wide variety of fresh produce, meat, fish, cheese, bread, and other food items, as well as flowers, plants, etc. Wochenmärkte are often held in town squares or other central locations and are a popular gathering place for locals. They offer a chance to buy fresh, locally sourced products directly from the farmers, bakers, and other vendors. Normally, there are also food stalls and seating areas where you can enjoy a meal or snack while taking in the sights and sounds of the market.

If you come close to the official end of the market you may get fruits and vegetables for a reduced price!

Products with a short "**Mindesthaltbarkeitsdatum**", the German equivalent of "Best Before", are often reduced in price. Normally the products are still safe to consume after the indicated date. While **meat** should be consumed before the expiration date, **canned and dried goods** are typically safe to consume for up to several months. **Baked goods** are safe to consume for up to a week. **Dairy products** should generally be consumed within a few days, however, hard cheeses can often be consumed for several weeks or even months after the best before date, as long as they have been stored properly. **As a rule of thumb: if it looks and smells well, it's still OK.**

Food rescue apps (e.g. Too Good To Go) that show you where there is leftover food at restaurants, supermarkets, or bakeries are another great way to save money and prevent food from being thrown away!





“We are custodians of a unique planet, gifted with a diversity of life that is unparalleled. Let us be guided by the wisdom of the natural world and the principles of sustainability, so that we may ensure a future where life continues to flourish in all its wonder.”

Sir David Attenborough

SHOPPING

Chapter 6



**Shop consciously,
make a difference**



Make Every Purchase Count

Sustainable shopping is about making choices that align with our values and contribute to a more sustainable future. One key aspect of sustainable shopping is reducing waste. This can be achieved by opting for **reusable or second-hand products**.

SECOND-HAND

At **DEFIBRILLATOR** you will find a colorful selection of clothes from the 70's, 80's and 90's. The shop run by students also offers delicious drinks and vegan cakes and biscuits every day! The shop at **Westerstraße 2** is open Monday to Wednesday from 11:00-19:00 and Thursday to Saturday from 11:00-20:00.

The newly designed second-hand shop **HELLO GOOD BUY** is located in the heart of Bremen city center at **Obernstraße 22-24**. The store offers a wide range of crop tops, sweatshirts, jeans, skirts, convers and accessories. Opening hours: Monday to Friday: 11:00-19:00, Saturday: 10:00-19:00.

Additionally, choosing products with minimal or recyclable packaging helps to minimize waste and reduce the demand for resource-intensive packaging materials.



Another important aspect of sustainable shopping is supporting **ethical and fair trade practices**. This involves seeking out products that are produced under fair labor conditions and ensuring that workers are paid a living wage. By supporting brands and companies that prioritize worker welfare and adhere to ethical standards, we

contribute to a more just and equitable global economy.

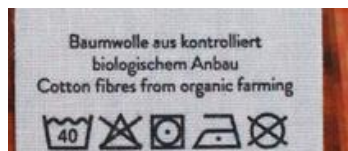
Sustainable shopping also means making informed choices about the products we buy. Choosing products made from **sustainable materials and produced using eco-friendly processes** helps to reduce our ecological footprint.



Look at the label before every purchase and consider - if it's synthetic - whether you really, really want to buy it. **Eco-certified clothing** often contains no or a much lower proportion of synthetic fibers than fast fashion. Their natural fiber content is significantly larger, some pieces are 100 percent of renewable raw materials. Here are some of the most recognized eco-labels for textiles:



Check also the small text on the labels: "**Baumwolle (kbA)**" stands for cotton from controlled organic farming, "**Wolle (kbT)**", stands for wool from controlled



organic animal husbandry. On some labels, the full version is used instead of the abbreviation.

Sustainable shopping aligns closely with **SDG 12**, as it encourages responsible and sustainable patterns of consumption.



10,000 l

of water are needed to produce one kilogram of cotton



By considering the environmental, social, and ethical implications of our purchases, we can collectively work towards creating a more sustainable and responsible consumer culture.

The lifecycle of **electronic** devices involves the mining for minerals like gold, copper, and rare earth elements which can lead to habitat destruction and pollution.

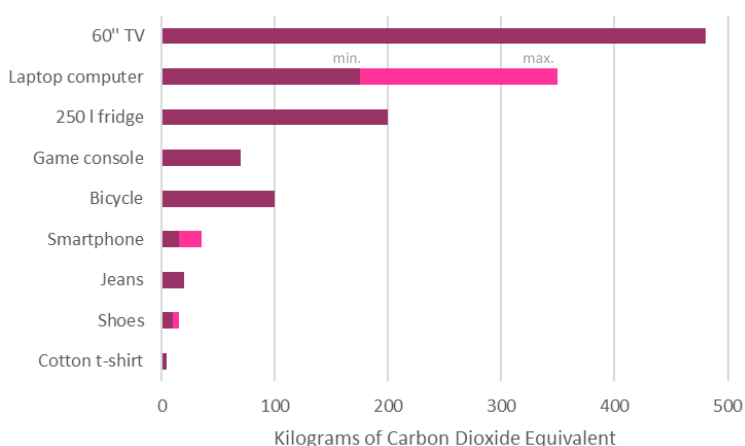
The lifecycle of **furniture** involves unsustainable logging practices and long-distance transportation that contributes to carbon emissions. Choosing furniture made from sustainably sourced materials and properly disposing of furniture are ways to reduce the overall environmental impact.

Many **cosmetics and personal care products** are packaged in single-use plastic containers, contributing to plastic waste. Choosing products with sustainable sourcing, minimal packaging, and eco-friendly ingredients can reduce the lifecycle impact.



If we take the case of an individual living alone who owns a TV, printer and bicycle, with a wardrobe of about 10 t-shirts, 10 shirts, 5 pairs of jeans/trousers, 7 sweaters/ jumpers, and three pairs of shoes, his/her carbon footprint would amount to approximately **4,000 kg (4 tonnes)** of CO₂e.

Ecological Footprint of typical Consumer Products



SUSTAINABLE DEVELOPMENT GOALS

How you can contribute to promoting sustainable shopping:

- **Raise Awareness:** Organize awareness campaigns, workshops, or events on campus to educate fellow students about the importance of sustainable shopping practices. Highlight the environmental, social, and economic benefits of making conscious purchasing decisions.
- **Form Student Groups or Clubs:** Create student groups or clubs focused on sustainability and responsible consumerism. These groups can organize activities like clothing swaps, secondhand markets, or eco-friendly fashion shows to encourage sustainable shopping habits among students.
- **Advocate for Change:** Use the collective voice of student organizations to advocate for sustainable practices within the campus community. Collaborate with university administrators, campus stores, and dining services to promote sustainable purchasing options, such as organic or locally sourced food, reusable containers, and eco-friendly school supplies.
- **Share Resources and Tips:** Create online platforms or social media channels to share information, resources, and tips on sustainable shopping. Provide guides on finding ethical brands, thrift shopping, DIY projects, and sustainable fashion trends. Encourage discussions and exchange ideas among students to foster a sustainable shopping culture.
- **Engage in Research and Projects:** Undertake research projects or academic initiatives focused on sustainable shopping practices. Conduct surveys or studies to assess student behaviors and preferences regarding sustainable consumption. Use the findings to develop targeted campaigns or initiatives that resonate with the student community.

***"There is more to life than working all day
- only to be able to afford products you do not need"***

Michael Cholbi, American Philosopher and Professor

WELLNESS & LEISURE

Chapter 7

**Nurture yourself.
Nurture the planet.**



SUSTAINABLE BLISS: ELEVATE YOUR WELLNESS WITH A GREEN TWIST



Sustainability entails creating a just and healthy world for all. How can you actively listen, take action, and learn in solidarity, demonstrating that individuals from all nations, classes, races, religions, abilities, and sexual orientations, gender matter during your time at IGC?

Amidst the bustling demands of student life, it's crucial to find moments of balance, relaxation, and rejuvenation. Your wellness activities can also contribute to a sustainable future. By embracing sustainable practices in your self-care routines, you can nurture yourself while minimizing your impact on the environment.

When it comes to physical fitness, explore sustainable exercise options. Swap the treadmill for outdoor activities like hiking, biking, or jogging in nature. Not only will you reap the physical benefits, but you'll also foster a deeper connection with the environment.



Engage in group fitness classes or sports activities that promote inclusivity and social interaction, reinforcing a sense of community and well-being.



Mindfulness and mental well-being are integral aspects of sustainable wellness. Practice meditation, yoga, or mindfulness exercises to cultivate inner peace and reduce stress.



Take time to unplug from digital devices and connect with nature, allowing yourself to unwind and recharge.



Explore sustainable practices like upcycling, DIY projects, or creating art from recycled materials, nurturing your creativity while reducing waste.

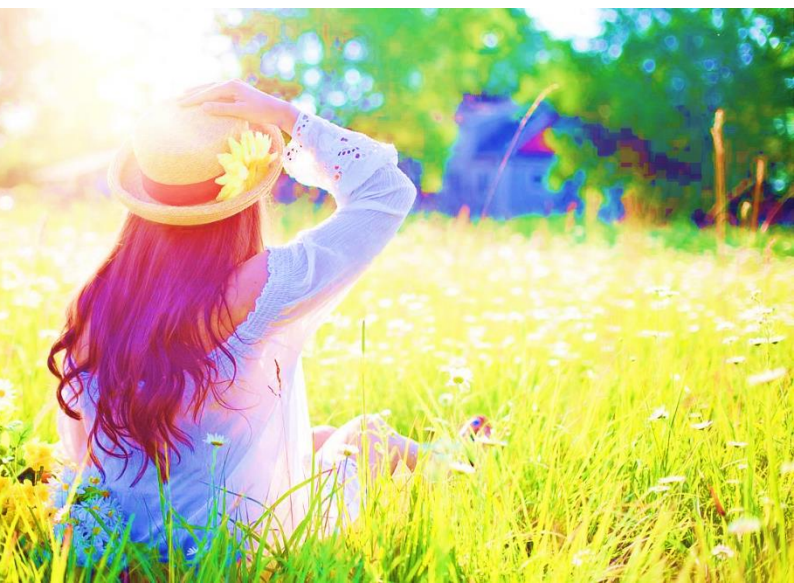
Did you know

that engaging in gardening and incorporating plants into our surroundings can significantly improve our lives and contribute to sustainability?

- Having flowers around the home **improves mood** and **reduces the likelihood of stress-related depression**.
- Spending time around plants has been found to enhance **interpersonal relationships**. Individuals who are exposed to ornamental plants tend to exhibit **higher levels of compassion**, leading to better connections with others.
- As plants produce oxygen, they increase the oxygen levels in their surroundings, promoting a sense of **happiness, security, and relaxation**.
- By absorbing carbon dioxide from the air, plants also help **prevent drowsiness** and **create a more refreshing environment**.
- Potted plants and flowers can **enhance cognitive function**, including idea generation and creativity.
- Being in natural environments and engaging in recreational activities are positively linked to increased physical activity levels, **which improves performance, boosts energy levels and vitality, uplift mood and contribute to overall well-being**.

10%

of carbon dioxide can be removed from a room by household plants



Power Up in Nature

Working out in nature utilize natural resources while minimizing the need for electricity and gym equipment. And by choosing to exercise in nature, you can actively engage with your surroundings. Here are some ways to work out outside:

Biking

With the "**Bike it!**" initiative, the city of Bremen wants to contribute to more people in the region getting on their bikes. Eight different bike tours were developed. There is a route planner with an interactive map and a description of the interesting things that can be discovered along the way (see also Ch. 8).



Swimming

People of Bremen can also swim in nature. This is possible in many waters, e.g. Stadtwaldsee/Unisee, Werdersee, or Weser near Café Sand. The temperatures and the water quality can be found **online**.



Running

There are usually various **running dates** in Bremen to encourage and motivate each other.



If you don't yet have a favorite route or are looking for a change, you can look for inspiration online, for example at **Fitforfun**.



Outside with a Ball

- **Table tennis:** Grab a ball and racket and let's go - there are table tennis tables on numerous playgrounds in the city.
- **Basketball:** Baskets for this can also be found on playgrounds.
- **Beach Volleyball:** Fields can be found, for example, at Café Sand and in the Neustadtswallanlagen.



SUSTAINABLE DEVELOPMENT GOALS

How you you can contribute to promoting sustainable fitness:

- Organize outdoor fitness events or group activities in natural settings such as parks or forests.
- Encourage the use of human-powered transportation options, such as walking or cycling, to get to and from fitness locations.
- Advocate for the development and maintenance of green spaces on campus for outdoor exercise.
- Share information and resources about the environmental benefits of exercising in nature through social media campaigns or student-led workshops.
- Initiate collaborations with local environmental organizations to organize clean-up activities or nature conservation projects alongside fitness activities.
- Promote the use of eco-friendly fitness equipment, such as biodegradable yoga mats or reusable water bottles.
- Encourage the use of natural light and ventilation in indoor fitness facilities to reduce energy consumption.
- Lead by example by adopting sustainable fitness practices and sharing personal experiences of the benefits of Green Fitness.



The Path Less Traveled: Discover Sustainable Travel and Leisure for a Greener Future

Choose Nature-Friendly Activities

Explore the beauty of the outdoors through activities like hiking, camping, or cycling. These low-impact adventures allow you to connect with nature while minimizing your carbon footprint.

Embrace Local Discoveries

Support your community by exploring local attractions and cultural events. Discover hidden gems, visit farmers markets, or attend local festivals, reducing the need for long-distance travel and promoting local sustainability.

Opt for Green Transportation

Whenever possible, choose eco-friendly transportation options such as walking, biking, or public transportation to reach your leisure destinations. Carpooling with friends is another great way to reduce emissions and share the environmental benefits.

Book Sustainable Accommodations

Many hotels have now adapted their operations to environmentally friendly standards. Many booking portals evaluate the ecological footprint of hotels using standardized data to make them transparent and comparable for you.

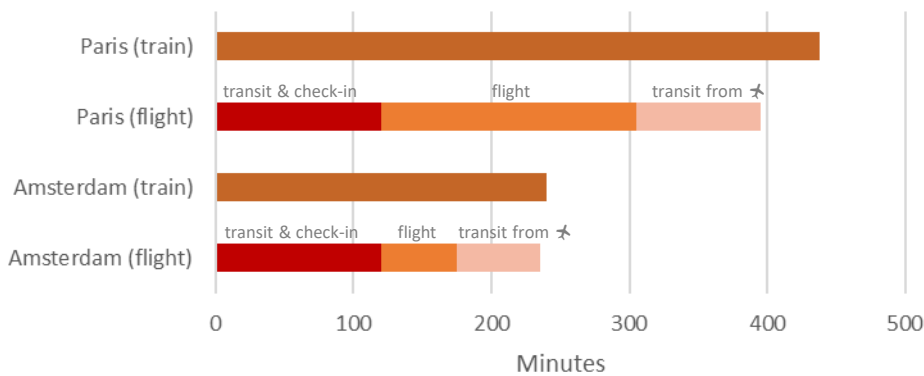
Avoid Packaging Waste on Trips

A quick coffee-to-go before departure and a take-away lunch on the train - the resulting packaging waste is enormous. Environmentally-conscious travelers use their own thermal mugs and allow themselves a few minutes break in a restaurant. If there is not enough time for this, you should preferably choose suppliers who rely on special eco-packaging, for example made of sugar cane.

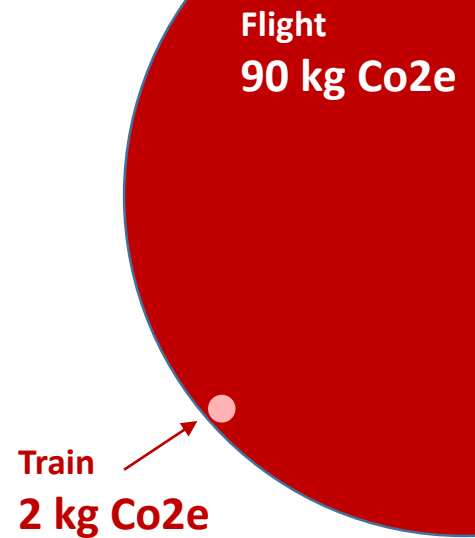


We often think that flying is faster, but if we include the time needed to and from the airport, check-in etc., going by train often don't take significantly longer!

Travel Time from Bremen



Ecological Footprint Comparison Bremen - Paris



Your Keys to Sustainable Adventures!



With your "Semesterticket" you can use all regional trains in Niedersachsen and sometimes even beyond for free! Whether you want to dip into the North Sea, enjoy bustling Hamburg, visit picturesque medieval towns, or hike the Harz Mountains you can go there in a sustainable way!



The "Deutschland-Ticket": Affordable and Unlimited Travel Across Germany

The Deutschland-Ticket (D-Ticket) is a convenient and cost-effective way to traverse the local public transport network throughout Germany. For a mere 49 euros per month, this ticket grants you unlimited access to all regional trains, trams and busses, every day of the week, even on holidays. The D-Ticket is easily obtainable through a digital monthly subscription, ensuring hassle-free purchasing. **Remember, if you no longer require it, be sure to cancel your subscription!**

FLIXBUS The German bus operator "FlixBus" offers cheap and convenient connections to many national and international cities. The company runs several buses daily from Bremen to Berlin and from there you can go to many Eastern European destinations.



These actions contribute to:

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION



TRANSPORTATION


Chapter 8


Are you ready to make a positive impact on the environment while enjoying the benefits of convenient and cost-effective transportation?
Sustainable transportation is a smart choice for both your daily commutes and occasional adventures





STEP INTO SUSTAINABLE TRANSPORTATION


By adopting sustainable means of transportation, you can contribute to reducing carbon emissions, improving air quality, and promoting a healthier environment. Embracing eco-friendly transportation not only benefits the planet but also enhances personal well-being and creates a more sustainable future for all.


 The most common mode of transport in Bremen is **tram and bus**. The lines cover most parts of the city with multiple stops which makes them easily accessible. The schedules are available in every station and online.


 Bremen has an extensive network of **cycling** paths and lanes which makes cycling easy, fast and safe. It has zero carbon emission and low maintenance.

 **842 bike racks on campus (of which 61 are covered and 42 lockable) make it easy to bike & park anywhere.**

 **Walking** is the best mode of transport for short distances. Bremen is a pedestrian-friendly city with wide sidewalks and a network of walking zones where cars are not allowed.

 **E-scooters** can be ridden in biking lanes but faster with more convenience! It has zero carbon emission and they are available throughout the city for rent.

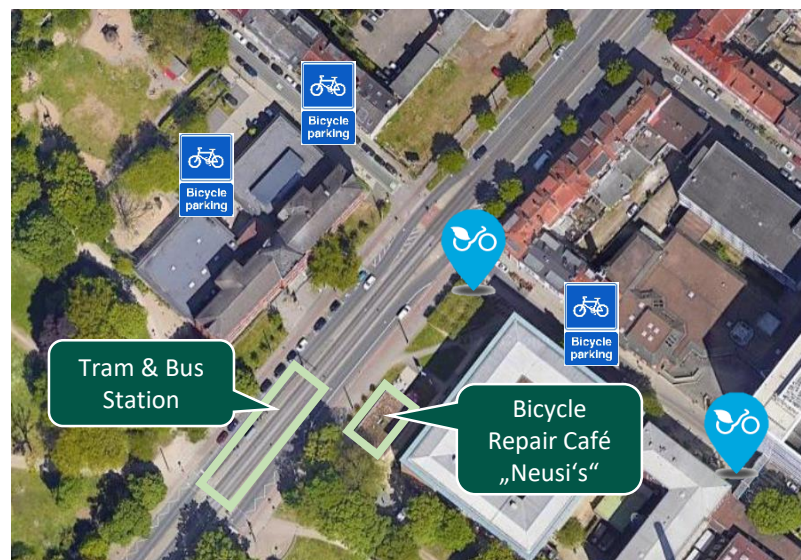
 **Trains and long-distance busses** are the most sustainable form of transportation to more distant destinations.

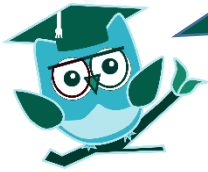
 **Since 2018 all Deutsche Bahn long-distance trains run 100% on green energy.**



In Bremen's "Alte Neustadt" district, Germany's **first model bicycle district** has emerged. Mobility and traffic are being rethought here in order to create a positive quality of life and mobile interaction for everyone. The transformation of the district into a bicycle zone has brought many improvements. The bicycle zone offers a coherent network of bicycle lanes, parking facilities, uniform signage and other facilities, like pumping and repair stations, to make bicycle traffic the preferred mode of transport.

The **bicycle repair café "Neusi's"** on the university campus vis-à-vis the IGC is a central pillar of the bicycle district and offers – besides coffee, cakes and other snacks – repair service for cyclists. A central component is the self-help workshop. A visit here costs five euros per half hour (plus any spare parts) and in return the visitors not only get the tools they need at their free disposal and a place to work, but also the support of the mechanic on request.





Are you ready to embark on an exciting journey through the world of bicycling? Whether you're an experienced cyclist or a beginner, biking in Bremen is easy and safe!

Flea Markets: Uncover Hidden Gems


Flea markets can be treasure troves for finding affordable bicycles. Flea market vendors often welcome negotiations, giving you a chance to strike a good deal. Before purchasing a bike at a flea market, it's essential to inspect it carefully. Don't hesitate to seek advice from experienced cyclists or mechanics if needed. And check for a proper documentation of ownership (e.g. an invoice), otherwise the bike may be stolen.

Discount Bike Shops

Discount bike shops are another fantastic option when searching for budget-friendly bikes. One of the biggest chains is B.O.C but also many other bike shops may have previous year models or bikes with minor cosmetic flaws available at a discount.

Bike Rentals

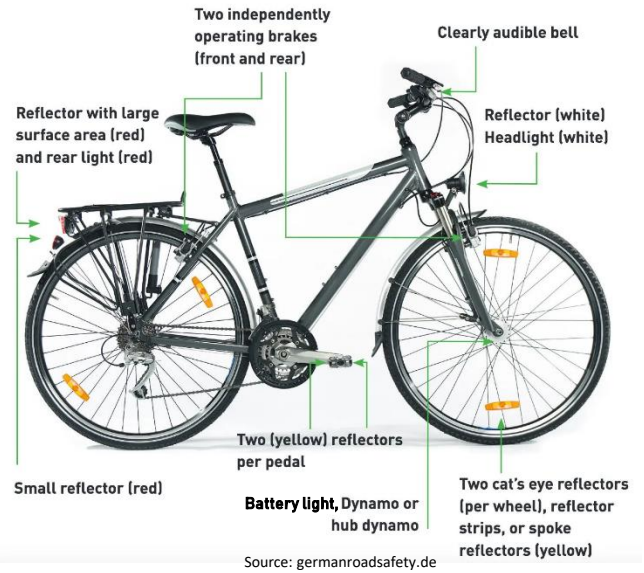
Bike rentals are a great way to enjoy the freedom of cycling without the long-term commitment or expenses associated with buying a bike.

 Students and employees of the HSB can use WK rental bikes for 1/2 hour free of charge, also several times a day - for business and private use. Only from more than 30 minutes per rental costs are incurred, up to a maximum of 9 euros per day (for 24 hours).

In the streets marked in blue and at WK-Bike stations, the return is free of charge. In the zone marked in pink, return is possible with a surcharge of 1€.

Gear Up for Cycling Success in Germany: Must-Have Bike Essentials

In order to meet the legal requirements for road use in Germany, bicycles must be equipped with a specific set of accessories. These regulations primarily focus on ensuring the safety of cyclists by enabling them to make sudden stops and enhancing their visibility during dark hours, particularly at night:



In Germany, stick to the streets and designated bike routes marked by blue signs or you face a 20€ fine! Sidewalk riding? That's a 55€ penalty! Going against the flow on bike paths or streets? Prepare for a 20€ fine! And don't even think of crossing a red light — pedestrians and cyclists risk a whopping 90€ fine!

So, hop on a bike, and let the wheels take you on a cycling experience!



Register here for WK-Bike. Important: Be sure to use your "@hs-bremen.de" address as e-mail address!



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