



Your CO₂- Calculator

Pedagogical material to
complement the CO₂
Calculator: project ideas and
work suggestions

Foreword – Däin CO₂-Rechner

Today, climate change is no longer questioned by science, but how can global warming be stopped and, if necessary, reversed? It is a complex problem, although the goal is supposedly simple: reducing the CO₂ footprint.

All living things release carbon dioxide into the atmosphere. Plants need it to live. Everyday activities, from surfing the internet to a burger to a cup of coffee, similarly release greenhouse gases. However, these gases can store a lot more heat than the atmosphere normally does. The result is a greenhouse effect where the planet's temperature rises. This increase in the global temperature can lead to ecosystems failing, species dying out, and an increase in extreme weather events in the form of storms, floods and droughts.

However, the less CO₂ and other greenhouse gases that are released into the atmosphere, the easier it will be for the climate to stabilise itself. Thus it is possible to aspire to CO₂ neutrality and to avert climate change.

The stimuli and ideas for project work in lessons presented below are intended to enable learners to inform themselves about this subject, to research facts and to form an opinion about the extent to which they are affected and which actions are appropriate, in their opinion.

The booklet is intended as educational support material for the online tool.

The calculator was developed by the klimAktiv organisation and adapted to the Luxembourgish context in collaboration with the Nohaltegkeetsrot (High Council for Sustainable Development). Calculating a personal CO₂ footprint is based on questions which are answered in the following categories: lifestyle, travel, living and electricity. There are exercises in the booklet for each of the categories, which can be used to gain a deeper understanding of the subjects.

Däin CO₂-Rechner:



IV. Fast Fashion

IV.1. What makes me tick!

Positioning activity

The teacher creates a slide show with the various statements about clothes consumption, and arranges the classroom in such a way that the students can move around freely and stand in three corners. The corners are labelled with paper signs, reading: “Yes!”, “No!” and “Don’t know.”

The questions are read out or projected, and the students answer by moving to one of the three corners. That forms an initial picture of opinions. The teacher then uses a few questions to look more closely at the positions some students have taken up, allowing them to explain their position.

- Buying clothes makes me happy.
- I’m happy every time I put on a new item of clothing.
- After buying something, people are happy for a long time.
- *Solden/Sales, Black Friday, Clearance Sales?* I’m going shopping!
- Branded clothes are important to most people.
- Brands stand for quality.
- The people stitching the clothes should be paid fairly.
- It’s important to people to know whether child labour has been used in the manufacturing.
- People research how their clothes are made.
- Fairly produced goods are important to consumers.
- People buy clothes when they need them. Any other considerations don’t matter.
- People should mend more clothes.
- Clothes say a lot about social status.
- It’s OK for fur for hoods to come from fur farms.
- I know shops that sell second-hand stuff.
- In Luxembourg, people buy a lot of things second-hand.
- I have clothes or accessories made from recycled material.
- People mainly pay attention to the price.
- Advertising and influencers influence us in our choice of clothes.
- Quantity is more important to me than quality.
- As a consumer, you have power.

IV.2. Why do we consume?

Placemat

The class is divided into small groups (max. 4 students). Each group is given a placement with four questions (cf. Activity III.5: “*Anti-Gaspi*”: combating food waste). The students each write a sentence or a keyword in a section. The placemat is then rotated. The next person adds their keyword or adds another statement. This can be played for a couple of rounds. After that, each group presents its results.

The four questions:

- What are a person's basic needs?
- Why are there other needs/desires in addition to the basic needs?
- What is a need that is important to you personally?
- Who or what influences people in how they consume?

IV.3. The clothing journey

Research

Materials: Items of clothing, world map, coloured pens, pins, coloured threads

Phase 1: The teacher first explains the three pillars of sustainability to the class: environment, economy and society.

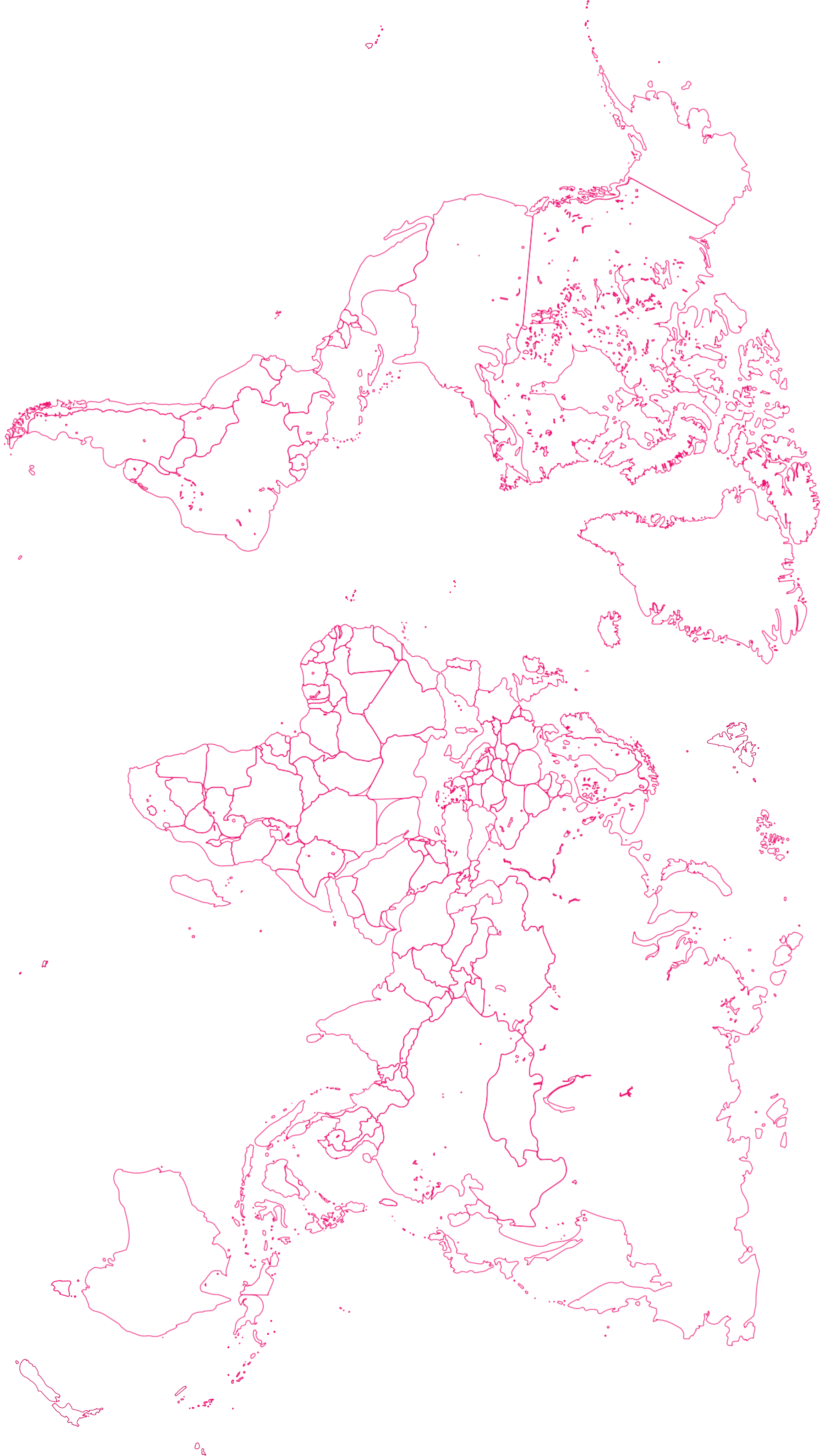
The students work in pairs, choosing 2–3 items of clothing they often wear day-to-day. Using the labels, they can find out where the items of clothing were manufactured. The students visualise on a world map where their clothing comes from. Once the map has been created, it is presented. In the class discussion, the following questions can be tackled:

- Are there similarities between the various maps?
- Why is more produced in certain countries?
- What does this mean for the three pillars of sustainability?

TIP: The teacher can bring along current statistics on clothes or fabric production, to compare the students' results with these figures.

Phase 2: The students research the various production stages for their clothes. For jeans, for example: planting, weaving, dying, artificial ageing ("vintage look"), transporting, selling.

After this, they create a simplified diagram of this manufacturing process. This can be supplemented with a geographical map showing the product's journey. How many kilometres has the item of clothing travelled when it is sitting on a store counter or brought home?



IV.4. Sustainable production: what is it? Who buys it?

The teacher hands out labels to the class that can be found on clothes. The students then research which stand for sustainability, where the labels come from, and what they mean. Analysis of the following statistics can serve as an additional input.



Closing discussion: Do labels influence people's purchasing behaviour? What are the reasons that someone chooses a certain product?

IV.5. My consumption and other people

Research

In groups or pairs, the students each research a particular subject:

- Environmental pollution through the conventional growing of cotton
- Environmental pollution through chemical dying processes
- Working conditions in clothes factories in Bangladesh, Turkey, etc.

The students produce a poster with the following viewpoints:

- What are the disadvantages and advantages for me?
- What are the disadvantages and advantages for people in the manufacturing process?
- Who profits the most?
- What is the impact on the environment?
- What can I do as a consumer to contribute to a positive solution?

Possible actions:

- Research where you can buy second-hand or upcycled products in Luxembourg.
- Organise a swap shop for clothes as a class, as part of a project day/project week.