



Home Truths Game

Source Document

Question:

Different fabrics can have very different environmental footprints – some can even have net-negative emissions. Do you know what materials your towels are made from?

- Cotton
- Organic cotton
- Bamboo
- Linen
- A mixture

Damage to the environment doesn't just happen when materials aren't properly disposed of. Often, the majority of emissions are generated during the production process. Fortunately, today, consumers have more sustainable options. For example, the organic cotton industry is predicted to grow 40% between now and 2028 – with regenerative farming practices, organic cotton could become a carbon-negative crop, by some estimates sequestering nearly 160kg more atmospheric carbon per acre than is released during crop production.

Sources:

[Organic cotton production may alleviate the environmental impacts of intensive conventional cotton production | Renewable Agriculture and Food Systems | Cambridge Core](#)

<https://www.euronews.com/green/2020/11/30/bamboo-eco-friendly-fabric-or-environmental-disaster>

[Spinnova helps brands tackle climate change: SPINNOVA® production saves more CO2 emissions than it emits - Spinnovagroup](#)

Lombard Odier calculation

Question:

We are replacing our clothes more frequently than ever before. What do you do with clothes and shoes you no longer want?

- Throw them away
- Have them recycled
- Give them to charity
- Sell them

On average, many of us wear our clothes as little as 10 times over the course of their lifetime. No wonder the fashion industry is responsible for approximately 10% of greenhouse gas emissions. With this in mind, limiting the amount we buy is the most significant decision we can make to limit our environmental impact. We can also choose clothes made from more sustainable materials. Clothing made from regeneratively-farmed wood can almost eliminate the textile industry's thirst for water; while crops such as cotton or hemp, when grown on regenerative farms, can be carbon-negative, sequestering carbon in soils where it may be stored for centuries.

Sources:

[10 Concerning Fast Fashion Waste Statistics | Earth.Org](#)

[DrawdownPrimer_FoodAgLandUse_Dec2020_01c.pdf](#)

[Regenerative agriculture can help feed the world. What is it? | World Economic Forum \(weforum.org\)](#)

Question:

The fast-fashion industry is increasingly producing clothes that wear out faster and are made from hard-to-recycle fabric blends. Where do you buy most of your clothes?

- Second-hand or vintage
- Mostly new from high street brands
- I focus on buying investment pieces

Because plastic-based textiles such as polyester and nylon shed microfibres when we wash them, an extra 500,000 tonnes of microplastics enter the ocean every year. That's the equivalent of 50 billion plastic bottles. If you're buying new clothes, try to invest in natural materials, such as silk and linen – under the right conditions their microfibres are likely to biodegrade more quickly than synthetic ones.

Sources:

<https://www.thegoodtrade.com/features/what-is-fast-fashion/#:~:text=Nowadays%2C%20fast%20fashion%20brands%20produce%20about%2052,%E2%80%9Cmicro-seasons%E2%80%9D%20a%20year%E2%80%94or%20one%20new%20%E2%80%9Ccollection%E2%80%9D%20a%20week>

<https://www.bbc.com/future/article/20200710-why-clothes-are-so-hard-to-recycle>

[FSI-and-MUFG-SII-Microfibres-the-invisible-pollution-from-textiles-January22.pdf \(firstsentier-mufg-sustainability.com\)](#)

[Microfiber pollution: an ongoing major environmental issue related to the sustainable development of textile and clothing industry | Environment, Development and Sustainability \(springer.com\)](#)

Question:

‘Fast furniture’ offers a budget-friendly way to furnish your home, but can bring its own environmental problems. Where do you tend to buy household furnishings and decorations?

- I mostly buy new from larger companies
- I look for vintage or reclaimed pieces
- I mostly shop at independent boutiques or small businesses
- I mostly get furniture by subscription

‘Fast furniture’ is on the rise, with 10 million tonnes discarded across the EU every year. As well as investing in well-made furniture from natural materials such as pine and bamboo, avoid furniture treated with ‘forever chemicals’ such as formaldehyde and artificial stain repellents, as these make recycling impossible and damage the environment.

Sources:

<https://eeb.org/wp-content/uploads/2019/05/Report-on-the-Circular-Economy-in-the-Furniture-Sector.pdf>

<https://www.theguardian.com/environment/2023/apr/07/toxic-pfas-fabric-stain-water-repellent-study>

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Question:

The form a cosmetic product takes can alter its environmental impact. What kind of soap do you normally buy?

- Liquid soap
- Bar soap
- I make my own

The environmental impact of the beauty industry stretches from end-user waste to distribution to production and the sourcing of raw materials. So when it comes to sustainability there’s no such thing as an inconsequential decision. For example, the carbon footprint of liquid soap is 25% higher than that of bar soap.

Source:

<https://pubs.acs.org/doi/abs/10.1021/es901236f>

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Question:

The refill movement is growing, spanning from disruptive start-ups to international retailers. Do you regularly use refillable bottles for cosmetics or cleaning products?

- Yes, always
- Only for cosmetics
- Only for cleaning products
- Never

Refillable cleaning bottles not only reduce plastic waste. The water dissolvable pods we top them up with are up to 90% lighter than traditional bottles, so they continually save on transport emissions throughout their lifetime. Only shipping active ingredients like this could help us replace 20% of the world's disposable plastic packaging with resalable alternatives.

Sources:

<https://www.bbcearth.com/news/10-simple-steps-to-a-more-sustainable-bathroom>

<https://www.vox.com/the-goods/2019/7/30/20727387/just-add-water-dehydrated-cleaning-beauty-environmental>

Question:

Electronic devices often pile up in cupboards as we replace them with newer models. What do you do with old laptops, phones and televisions?

- Throw them away in the rubbish
- Use a specialist e-waste bin
- Return them to the manufacturer for recycling
- Most of them are in a cupboard somewhere...

Around the world we throw away a whopping 53.6 million tonnes of e-waste every year, the same weight as 4,500 Eiffel Towers. Much of this contains valuable materials that can play an essential role in building a more sustainable world. For instance, if everyone in a city the size of Barcelona recycled 100% of their e-waste it would save enough silver to manufacture solar panels for around 29,000 homes.

Sources:

<https://www.endesa.com/en/blogs/endesa-s-blog/light/calculate-how-many-solar-panels-a-house-needs>

<https://www.statista.com/topics/3409/electronic-waste-worldwide/>

<https://www.lombardodier.com/contents/corporate-news/ft-rethink/2023/march/is-a-sustainable-electronics-ind.html>

Question:

Industry experts say that laptop computers can continue to work well for up to a decade. How often do you upgrade your laptop?

- Every year
- Every few years
- I keep them until they break
- I don't own a laptop

As up to 80% of the environmental damage a laptop creates happens during manufacturing and distribution, choosing to replace yours only when necessary greatly reduces your impact. Every new laptop you don't buy saves 300 kg of CO₂, 1,200 kg of toxic mining waste and 190,000 litres of water. If you must replace, consider refurbished or second-hand options.

Sources:

<https://www.businessinsider.com/guides/tech/how-long-do-laptops-last?r=US&IR=T>

<https://www.cmswire.com/digital-experience/why-laptop-sustainability-is-a-serious-matter/>

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Question:

Distribution is a key part of food's environmental impact. How often do you use food or grocery delivery services?

- Daily
- Weekly
- Monthly
- Very occasionally

Global food systems are a major contributor to the climate challenge. When it comes to distribution, clean and efficient packaging and transport are essential. For instance, over 2 billion takeaway containers are used every year in the EU. If even just 50% of Styrofoam containers were recycled it would save the same amount of greenhouse gas emissions as permanently taking 55,000 cars off the roads.

Source:

[Takeaway containers – the environmental cost of packing our favourite fast-foods \(manchester.ac.uk\)](https://www.manchester.ac.uk/research/centres/centre-for-sustainable-business/2018/05/24/takeaway-containers-the-environmental-cost-of-packing-our-favourite-fast-foods/)

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Question:

Some coffee farmers are already feeling the impacts of climate change. How do you make your morning coffee?

- I use beans or grounds
- I use disposable pods
- I use biodegradable pods
- I order from a delivery service
- I don't drink coffee!

With 29,000 single-use pods ending up in landfill every minute, coffee pods have a poor reputation. But, they are less emissive than filter coffee made from beans or grounds. 40% to 80% of coffee's emissions come from the bean harvesting and production; as coffee pods are pre-portioned they waste less product. Buying coffee that is certified deforestation-free can also help – agroforestry- and regeneratively-grown coffee has been shown to boost soil health and carbon sequestration, reduce the need for irrigation, and cut the toxic downstream impact of pesticide use.

Sources:

[Rising temperatures in tropics to lead to lower coffee yields and higher prices, study suggests | Climate crisis | The Guardian](#)

[Coffee pod carbon footprint better for planet than filtered brew - BBC News](#)

[Coffee pods from the Future. – Grind](#)

[Frontiers | A Study of Regenerative Farming Practices and Sustainable Coffee of Ethnic Minorities Farmers in the Central Highlands of Vietnam \(frontiersin.org\)](#)

Question:

Our dietary choices play a significant role in food's environmental impact. Do you eat meat and dairy?

- I'm vegan or plant-based
- I eat everything
- I'm vegetarian
- I'm pescatarian
- I eat meat but not dairy
- I eat meat, but just a little

Just one meat free day a week can shave nearly 100 kg of CO2 emissions – the equivalent of burning 50 kg of coal – from our individual annual carbon footprints. Buying meat or fruit and vegetables from regenerative farms makes a big difference. By boosting soil's ability to sequester carbon, regenerative farming can be net carbon negative. On a global scale this could be a significant tool in tackling the climate challenge. A 1% increase in the carbon concentration of the world's soils could capture more carbon than our total emissions from burning fossil fuels.

Sources:

[Calculate the environmental footprint of your food - BBC Future](#)

<https://news.exeter.gov.uk/how-much-carbon-could-you-save-by-going-veggie-or-vegan-every-so-often/>

<https://www.weforum.org/agenda/2021/08/carbon-in-soil-key-to-halting-climate-change/>

Question:

One third of all the food we eat goes uneaten. How do you deal with food waste?

- It goes in the rubbish with everything else
- I use a food waste bin
- I compost it

Our individual choices really do add up: 70% of food waste comes from ordinary households. If everyone in the UK started to properly dispose of their food waste tomorrow, 25 million tonnes of CO2e would be saved, which is equivalent to taking 10 million cars off the road.

Sources:

[UN report: one-third of world's food wasted annually, at great economic, environmental cost | UN News](#)

[Action on food waste | WRAP](#)

[Greenhouse Gas Equivalencies Calculator | US EPA](#)

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Question:

Do you look for sustainability certifications, such as the Fairtrade or the Rainforest Alliance symbols, when choosing snacks like chocolate?

- Yes, this is a major concern for me
- Sometimes
- No, this isn't a factor for me

Between 1988 and 2007, more than two million hectares of forest were lost to cocoa production in West Africa alone. Organisations like the Rainforest Alliance offer hope. Currently, 6 million hectares of farmland are protected and certified as sustainable by the Rainforest Alliance. The widespread adoption of regenerative agroforest cocoa farming can reverse deforestation while boosting crop yields by as much as 50%.

Sources:

iisd.org/system/files/2022-11/2022-global-market-report-cocoa.pdf

[COCOA: Overview, Uses, Side Effects, Precautions, Interactions, Dosing and Reviews \(webmd.com\)](#)

<https://energysavingtrust.org.uk/chocolate-sustainability-cost/>

[Forest- and farmer-friendly cocoa in West Africa \(worldbank.org\)](#)

[Climate Stories | Ghana Carbon Credits \(worldbank.org\)](#)

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>

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Question:

Replacing white goods can be resource intensive – however, older items can be less efficient. How old is your fridge?

- Less than ten years old
- Ten years old or more

While it's true that repairing white goods is often more sustainable than scrapping them, newer fridges are up to 33% more efficient, meaning that it's often better for your emissions output in the long run to upgrade. Cooling technologies currently account for 10% of greenhouse gas emissions, so the potential savings are huge. Furthermore, older fridges can leak HFCs (potent gases that are 13,000 times more potent than CO₂).

Sources:

<https://reviewed.usatoday.com/refrigerators/features/upgrading-your-refrigerator-can-save-you-money>

<https://www.annualreviews.org/doi/10.1146/annurev-environ-012220-034103>

Lombard Odier Research

Question:

A lot of energy is needed to heat water. How do you generally do your laundry?

- Wash at home at 30° or below
- Wash at home at over 30°
- Dry cleaners or laundry service
- I wash everything by hand

While we all know washing at lower temperatures is better for the planet, it's important not to become complacent. A single household can cut over 350 kg of carbon pollution a year by washing four out of five laundry loads in cold water. That's the same as the emissions produced by driving from Paris to London and back or charging 42,000 smartphones.

Sources:

<https://www.nationalgeographic.com/environment/article/eco-friendly-sustainable-laundry#:~:text=It's%20a%20wash&text=Heating%20water%20for%20the%20wash,sufficient%20for%20most%20laundry%20loads.>

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>

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Question:

Tourism income is essential for some environmental protection projects. How far do you like to travel for holidays?

- I prefer a staycation in my home country
- I take a short-haul flight to somewhere near home
- A long-haul flight is a must
- I love to travel abroad by boat or train

Swapping short-haul flights for train journeys could offer as much as an 85% reduction in CO2 emissions per trip. For example, a roundtrip from London to Nice by plane emits 250kg of CO2, whereas taking the train emits just 36kg. The difference is the same reduction in emissions you could create by growing three trees for ten years.

Sources:

[The substitution of short-haul flights with rail services in German air travel markets: A quantitative analysis - ScienceDirect](https://www.sciencedirect.com/science/article/pii/S0950080420300000)

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>

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Question:

Efficiency gains can be made in the way we cook. Do you have an induction stove top?

- Yes
- No, it's electric
- No, I use gas

Induction stoves are 5-10% more energy-efficient than conventional electric stoves and about three times more efficient than gas stoves, making them an excellent alternative.

Source:

https://www.energystar.gov/partner_resources/brand_owner_resources/spec_dev_effort/2021_residential_induction_cooking_tops

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Question:

Renewable electricity is growing fast, though the majority of home heating is still gas-produced. Do you know how most of your household energy is generated?

- Gas
- Solar panels
- Electricity
- A mix of renewable energy sources

Although not quite mainstream, air source heat pumps offer staggering improvements on the efficiency of a traditional gas boiler. While good gas boilers tend to have an efficiency rating of around 90%, air source heat pumps generate a far larger ratio of energy to heat, meaning they can offer efficiency ratings as high as 400%.

Sources:

<https://www.iea.org/energy-system/buildings/heating>

<https://www.endotherm.co.uk/air-source-heat-pump-efficiency/#::~text=While%20gas%20boilers%20typically%20have,to%20four%20units%20of%20heat.>

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Question:

What's your preferred mode of travel?

- Driving my petrol or diesel car
- Driving my own electric car
- Walking, cycling or scooting
- Public transport
- Car-sharing
- Private car hire or taxis

Transport is responsible for around one fifth of global emissions. Switching just one trip a day from driving to cycling could reduce your CO2 emissions by about 0.5 tonnes every year. That's equivalent to the amount of CO2 produced from burning 225 kg of coal.

Sources:

<https://ourworldindata.org/co2-emissions-from-transport>

[Ditching the car for walking or biking just one day a week cuts carbon footprint | Imperial News | Imperial College London](#)

<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>

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Question:

Most of our direct water consumption takes place in the home. How do you like your baths or showers?

- I like showers, as long and hot as possible!
- I just have a quick rinse in the shower
- I prefer leisurely baths

Pop-up statistics: If every household in a country the size of the UK took just one minute off one shower every day, it would save the nation £215 million in energy bills every year.

Sources:

<https://www.epa.gov/sites/default/files/2017-03/documents/ws-factsheet-indoor-water-use-in-the-us.pdf>

[Shower vs Bath: Which one uses more energy? - VeryWellBeing.co.uk](#)

energysavingtrust.org.uk/sites/default/files/reports/AtHomewithWater%287%29.pdf

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Question:

Many homes now have more than a dozen internet-connected devices. Do you leave your electronics on standby?

- Yes, always
- No, I switch them off at the mains
- I switch off some things but leave the WiFi on

Many of us underestimate just how much energy ‘vampire’ appliances in standby mode can burn through. In reality, switching them off at the mains could reduce your overall electricity consumption by as much as 23% and your electricity bill by over £100.

Sources:

[Smart Home: Apple Is The Fastest-Growing Connected Device Company \(forbes.com\)](#)

[Sustainability-In-Tech : Switch Off ‘Vampire’ Devices And Save An Average Of £147 Per Year \(gmal.co.uk\)](#)



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