You Definitely Don't Know This Could Save Energy — 10 Ideas for Earth Day

Think you know how to save energy? You turn off the lights. You don't waste water. You might even recycle. But what about the energy you can't see at all? The hidden climate costs of our everyday digital habits are real and nobody talks about them loudly enough.

1. 🤖 Every question you ask an AI uses as much energy as several Google searches

When you type a message to an AI, it feels like you're just typing on a keyboard. In reality, you're switching on a server the size of a truck.

Researchers have estimated that a ChatGPT query consumes about five times more electricity than a simple web search. Exact figures are hard to nail down, tech companies are not very transparent. OpenAI disclosed in 2025 that a standard text query uses about 0.34 Wh of electricity. Google published data showing that the median Gemini text prompt consumes about 0.24 Wh and produces 0.03 grams of CO_2.

Sounds tiny? Think about scale. Data centres in the US consumed around 200 terawatt-hours of electricity in 2024, roughly what it takes to power Thailand for a year. AI-specific servers accounted for an estimated 53 to 76 terawatt-hours of that total.

And there's something almost nobody talks about: generating a short AI video, say, a 5-second clip using OpenAI's Sora, can require nearly 1 kWh of energy, roughly equivalent to running a vacuum cleaner for an hour.

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What can you do? Before asking an AI, consider whether you really need it or whether a regular search engine would do. Write clear, specific prompts and ask everything at once rather than sending ten follow-ups. Avoid generating videos and images unless you genuinely need them.

2. 📺 Your Netflix series emits more CO_2 than you might expect from a flight

You may not board a single plane this year and feel good about it. And yet video streaming…

According to a report by InterDigital, video streaming accounts for 4% of global carbon emissions. For comparison: all aviation generates around 2%. Emissions from one hour of HD streaming run to about 55 grams of CO_2e.

Emissions vary dramatically depending on the device. Streaming through a laptop without an external monitor produces about 10g CO_2e per hour. The same film on a desktop with a large screen can reach 50g CO_2e per hour. Watch in 4K and multiply that several times over.

What can you do? Watch on smaller devices where you can. Drop from 4K to HD on a phone screen, you genuinely won't notice the difference. Download films in advance over Wi-Fi rather than streaming over a mobile network (3G uses more energy than Wi-Fi).

3. 📧 That "Thanks!" reply costs the climate more than you think

How many emails do you send every day that carry no real information? "Thanks!", "OK", "Confirmed."

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According to Mike Berners-Lee's book *How Bad Are Bananas?*, an ordinary email has a footprint of about 0.3g of CO_2e. Add a large attachment and that can jump to 50g CO_2e. Short, unnecessary emails could collectively emit as much CO_2 each year as 3,334 diesel cars.

Why? Because every message requires energy to send, filter through spam servers, store in the cloud (for both sender and recipient), display as a notification, and often sit in an archive for years.

What can you do? Unsubscribe from newsletters you never read. Instead of sending large files as attachments, share a cloud link (less data transferred). Before you reply with "OK" ask yourself whether it's genuinely necessary.

4. 👗 A T-shirt from Shein isn't just an ethical problem - it's an energy problem

Fast fashion is the second most polluting industry in the world. But most of us think about it in terms of worker exploitation, not energy and climate.

The fashion industry accounts for around 10% of global CO_2 emissions, roughly equal to the total emissions of the European Union. At the same time, 85% of all textiles end up in landfill every year.

Producing a single cotton T-shirt requires around 2,700 litres of water - enough drinking water for one person for more than two years. On top of that comes the energy required for production, dyeing, transport (clothing often circumnavigates the globe several times before reaching a shop), and washing.

Research has found that the carbon footprint of wearing fast fashion jeans once is 2.5 kg CO_2e - equivalent to driving around 10 km in a petrol car. That is 11 times higher than under a traditional approach to clothing consumption.

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What can you do? Buy less and less often. Go second-hand: Vinted, eBay, local charity shops. Second-hand clothing trade has the highest mitigation potential of any model in the fashion sector, potentially reducing the carbon footprint of clothing by up to 90%. If you have to wash, do it at 30°C (heating the water is the most energy-intensive part of the whole process).

5. 🔌 Your devices are drinking electricity even when they're "off"

The TV on standby. The charger without a phone in the socket. The microwave ticking away with its clock display.

This is called *phantom load*, vampire power, the silent energy drain quietly bleeding your wallet.

According to the Energy Saving Trust, between 9% and 16% of all electricity consumed in homes comes from devices on standby. 75% of the energy consumed by household devices is drawn when those devices are not actively being used.

Research shows that phantom load can account for up to 30% of an average household's electricity bill.

The main culprits: televisions (waiting for a remote signal), gaming consoles (updating themselves overnight), printers, routers, microwaves with clock displays, chargers with no device attached.

What can you do? Buy a power strip with a switch and cut an entire cluster of devices with a single click. Unplug chargers when you're not charging anything. Switch your router off at night, and sleep better (literally).

6. 📹 Turning your camera on during a video call emits 25x more CO_2 than audio alone

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The pandemic taught us to Zoom. But did it teach us to Zoom in an energy-smart way?

Switching off your camera can cut emissions by 96%, since video calls emit almost 25 times more CO_2 than audio-only calls.

The difference comes from the sheer volume of data being transmitted in real time. Every second of HD video carries hundreds of times more data than voice — which means more load on servers, more energy in data centres, more emissions.

What can you do? Consider turning off your camera when you don't need it on screen - especially in long meetings with a weak connection. Switch to audio-only when possible. And sometimes: could a phone call just do the job?

7. ☁️ Your photos in the cloud are stored on servers often powered by coal

"Backed up to the cloud" sounds light and weightless. In reality it's a concrete building full of thousands of servers, ventilation systems, and cooling units, running 24 hours a day.

US data centres consume as much electricity as the entire country of Thailand does in a year. A Harvard study found that the carbon intensity of electricity used by data centres is 48% higher than the US average, because data centres disproportionately draw from fossil-fuel-heavy grid segments.

Have 10,000 photos from the past five years? A good chunk of them are duplicates, unsorted, and will never be opened again. And yet, they sit on a server that is working all the time.

What can you do? Do a digital spring clean: delete duplicate photos (there are apps that do this automatically), turn off auto-backup for files you don't need. Delete old versions of documents. Leave old group email chains. Clear your inbox of spam, every email is sitting on a server somewhere.

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8. 📦 Free returns are not free for the planet

"I'll order five sizes and send four back." Perfect logic for your wallet. Less perfect for the climate.

Every parcel has a carbon footprint, a lorry, a sorting centre, another lorry, an airport (if you ordered from abroad), yet another lorry to your door, and then the whole thing in reverse. The e-commerce sector in the EU generates millions of return parcels every year.

And there's something else: 92 million tonnes of textiles end up in landfill globally every year, and a large portion of that comes from "returned" products that are never resold, but destroyed instead, because the logistics of resale cost more than disposal.

What can you do? Before you click "buy", check the size guide, read reviews, watch product videos. Order from one shop rather than five different ones. Buy locally when you can, smaller transport footprint.

9. 🥩 Eating less meat saves more energy than switching off all your light bulbs

This is one of the most well-documented but still counterintuitive energy facts: your diet has a bigger impact on your carbon footprint than most consumer choices combined.

Producing 1 kg of beef requires about 15,000 litres of water and generates around 27 kg CO_2e and those numbers hide enormous energy use: powering agricultural machinery, producing animal feed, running refrigeration, transport. For comparison: producing 1 kg of lentils emits roughly 20 times less.

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You don't need to go vegan. One fewer meat-based meal per week, multiplied across millions of people, has a real, measurable energy and climate impact. Diet change is one of the most powerful levers available to an individual.

What can you do? One meat-free day a week (like Meatless Monday). Swap beef for poultry or pulses. Cook more from scratch at home, ready meals have a higher carbon footprint because of packaging and refrigerated logistics.

10. 🌱 And finally — the thing that actually works: talking to other people

This sounds like a tip from a 1990s pamphlet. But the research is clear: individual actions matter, but systemic actions matter many times more. And systemic change begins with a shift in social norms.

The ELY (*Energy Literacy for Youth*) project has been researching why energy education so rarely changes behaviour. The answer is simple: knowledge without social context is not enough. When we talk about climate and energy with someone close to us: a friend, in the family, in a classroom, at work - we activate a mechanism that changes things faster than any article on the internet.

Tell someone about the climate costs of AI. Share this article. Ask a friend whether they've unsubscribed from newsletters they never read.

The energy we don't use is the cleanest energy of all.

🌍 **Earth Day is not just one day.** It's a reminder that every day we can choose differently and that those choices, however small and invisible, accumulate into something real.

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