

RETHINKING OUR DIGITAL HABITS



• Report 2026 V1 •

Summary

Every day we send emails, we exchange messages, we post videos and pictures, we search the Internet, we stream series, music and movies, and we often store data, pictures and videos in the cloud. Most recently the use of AI has become widespread and part of the fabric of our daily digital lives. By using an increasing number of devices and applications (laptops, desktops, smartphones, tablets, gaming consoles, smart TVs, etc), which are powered by routers, servers, data centres, telco devices, etc. The consumption of energy and non-renewable resources is dramatically increasing. The growth in population and affluence is leading us to an ever growing “sustainability gap”¹.

Becoming aware of the impact our digital behaviour can have on the environment is the first step to changing our digital habits. Adopting greener, smarter digital habits can contribute to the sustainable development of our society, respecting the boundaries of Earth’s limited resources, while preserving ecosystems for the benefit of all of humanity. Just as we’ve embraced eco-friendly practices in other parts of our lives—using reusable bags or cutting down on single-use plastics—we can also make our digital lives more sustainable without sacrificing the conveniences of the digital age.

¹<https://cacm.acm.org/research/the-sustainability-gap-for-computing-quo-vadis>

Major coordinated policies and actions must be taken by governments and public authorities, as well as by private corporations to ensure proper instruments are adopted to enable real and lasting change. **We need substantial investments, policies and regulations, as well as fiscal incentives and education.** The European Commission has made this a major priority with the European Green Deal² and the binding commitment under the EU Climate Law of making Europe the first climate-neutral continent in the world. More specifically to reduce its net greenhouse gas emissions by at least 55% by 2030³. This aligns with the United Nations 2030 Agenda for Sustainable Development⁴ and other multilateral environmental agreements.

At the same time, **we need each individual to become part of the change** and contribute to a green transition of our society. Improved digital habits such as **conscious connectivity and economy of data** can have a significant positive impact, especially when enforced at all levels, from private to business contexts. This report provides practical, simple and actionable evidence-based recommendations and tips to reduce our digital carbon footprint - the environmental impact of our digital life. It is organized in three critical pillars: **Extending the Lifespan of our Devices; Reducing the Energy Consumption of our Devices and Rethinking our Online Behaviour.**

Shifting toward a more mindful digital existence doesn't require us to disconnect but to optimize the technology we already use to better serve both our needs and the planet. **Don't know where to start? Start by being mindful of your digital habits and the environmental impact of your devices. Implementing small but important changes can be the beginning of a new relationship with technology and ultimately with our planet!**

² https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

³ https://commission.europa.eu/topics/climate-action/delivering-european-green-deal_en

⁴ In particular SDGs 6, 7, 11, 12, 13, 14 and 15 - see <https://sdgs.un.org/goals>



Technology is increasing electricity demand

Estimates of the ICT sector's (including its main subdomains: consumer devices, connectivity networks and data centres) share of the global CO₂ emissions range from 1.5 to 4%⁵. This is expected to go up, with the ICT sector accounting for 10% to 20% of global electricity demand by 2030⁶. However, with the rapid and unpredictable changes in technologies development, future predictions can vary significantly⁷. Trends indicate that by 2035 there could be 50 billion "connected things" globally⁸.

⁵ <https://www.worldbank.org/en/topic/digital/publication/measuring-the-emissions-energy-footprint-of-the-ict-sector-implications-for-climate-action>

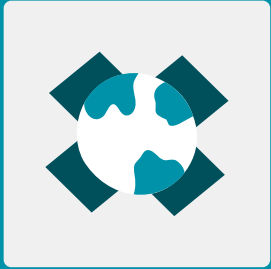
⁶ <https://www.sciencedirect.com/science/article/pii/S2214629618301051>

⁷ <https://www.sciencedirect.com/science/article/pii/S1364032125008494>

⁸ <https://iot-analytics.com/number-connected-iot-devices>

Global CO₂ emissions range





Technology is damaging the environment

Electronic devices have a massive “cradle-to-grave” environmental impact, with around 80% of their “embedded” carbon footprint occurring during production and around 20% during use. Mining rare-earth minerals and raw materials for the manufacturing of ICT devices and infrastructures destroys natural ecosystems. Energy-intensive manufacturing, shipping and distributing processes reliant on fossil fuels are a major contributor to the current climate crisis.

E-waste is the fastest growing form of waste with a record 62 billion kg generated globally (equivalent to an average of 7.8 kg per capita per year) in 2022⁹. Only 22.3% of it was documented as formally collected and recycled in an environmentally sound manner. Improper disposal or burning leads to severe environmental and health hazards, including toxic heavy metal exposure and contamination of ecosystems, soil, water and vulnerable communities.

Electronic Devices Embedded Carbon Footprint

80%

⁹<https://api.globalewaste.org/publications/file/297/Global-E-waste-Monitor-2024.pdf>



Technology is driving overconsumption

The current fast tech culture promotes disposability, a 'replace' rather than 'repair' mindset - consumerism vs circularity. Millions of people upgrade to the latest smartphone, tablet, or laptop, discarding perfectly functional devices. We've been conditioned to believe that tech should be disposable, that progress means replacing rather than maintaining. This mindset comes at a significant cost also to our planet.

1

Extending the lifespan of our devices

The environmental impact of electronic devices is created not only by their energy consumption while in use. From the mining of raw materials to manufacturing, transport, distribution and disposal, their carbon footprint is huge. The “embodied carbon” - often accounts for more than 80% of a device’s total lifetime footprint ¹⁰.

16+ Age

Unique mobile users



5.78
Billion

Own a smartphone



97%
of Internet Users

Own a laptop or desktop



56%
of Internet Users

In October 2025 there were around 5.78 billion unique mobile users around the world, which equates to 70.1% of the global population. Around 97% of internet users aged 16+ own a smartphone, while around 56% own a laptop or a desktop computer¹¹.

¹⁰ <https://www.weforum.org/stories/2020/01/save-the-planet-one-mobile-device-at-a-time/>

¹¹ <https://datareportal.com/reports/digital-2026-global-overview-report>

The most effective way to reduce our individual and collective digital carbon footprint is to use our electronic devices as long as possible. Extending a device's life by just one year can be the carbon equivalent of taking 2 million cars off the road globally¹².



Here we provide several suggestions on how to hold longer to our electronic devices, aiming to adopt a minimum **5-Year Rule** - keeping smartphones, laptops, tablets and other devices for at least 5 years.

Buy from companies committed to sustainability

Choose brands with high repairability scores. A useful curated list of several devices with repairability scores is provided by IFIX-IT¹³. For Smartphones and Tablets a new repairability score system has been introduced with scores displayed on the new Energy Label that accompanies these devices¹⁴. As important is to choose companies that assure longer term software support with guaranteed OS upgrades and security patches, supporting therefore device longevity.

Choose “greener” devices whenever possible

Check the label - there are several standards to certify the eco-friendliness of devices that typically consume less energy, use recycled materials, can be repaired, etc.

¹² <https://eeb.org/wp-content/uploads/2019/09/Coolproducts-report.pdf>

¹³ <https://www.ifixit.com/repairability>

¹⁴ https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/new-eu-labels-help-consumers-choose-more-repairable-electronics-2025-06-20_en

Ecolabeling has progressed significantly in recent years and can be found in a multitude of electronic products in several countries across the world¹⁵.

Repair instead of replace

Take advantage of expanded 2026 Right-to-Repair laws¹⁶ and resources¹⁷ and choose to repair faulty electronic devices.

Extend batteries lifespan

The battery is usually the first component to fail in an electronic device and the number one reason for the purchase of a new device. A few tweaks and care can extend the active life of our device's battery:

- **The “Sweet Spot” (20–80% rule):** lithium-ion batteries are most stressed at 0% and 100%. Aim to keep the charge between 20% and 80%. Use “Optimized Charging” setting to keep the battery in this range.
- **Skip fast or ultra-fast chargers:** they generate extra internal heat. Use a standard 5W or 10W “slow” charger for overnight charging.
- **Avoid heat during charging:** never charge a device under a pillow or in direct sunlight. If the phone or other device gets hot while charging, the case, or any cover, is likely trapping heat, remove it to allow heat to dissipate.
- **Stop “vampire” charging:** don't leave devices plugged in 24/7 if it doesn't have a “Desktop Mode” or “Bypass Charging.” Bypass charging allows the device to run directly off the wall outlet without passing electricity through the battery.

¹⁵ <https://globalecolabelling.net/organisations/>

¹⁶ https://commission.europa.eu/law/law-topic/consumer-protection-law/directive-repair-goods_en

¹⁷ <https://repair.eu>

Second-hand first

If a repair is deemed “impossible,” the EU now allows and encourages manufacturers to offer refurbished units as a replacement instead of brand-new ones¹⁸. Many electronics retailers also offer fully functional “almost new” options at reduced prices.

Protecting mobile phones/tablets screens

Broken or scratched screens are among the main reasons for the purchase of a new device. Simple choices can help to prevent that:

- **Use tempered glass screen protectors:** they are more efficient than plastic film protectors in absorbing impact and preventing cracks.
- **Choose the right protective case:** choose a high-quality, shockproof case that protects the edges and extends over the screen ensuring that if the phone falls face-down, the case hits the ground, not the glass.
- **Safe handling:** avoid using the phone while multitasking and use a grip to prevent drops.
- **Storage habits:** never keep your phone in your back pocket, as this leads to sitting on and crushing the screen.

Recycle and repurpose

Don't keep old devices stored at home. If still in good work conditions, consider donating it to schools or community programs or participate in electronic recycling campaigns.

Responsible end-of-life disposal

Never throw electronic devices in the regular trash. Instead, bring it to dedicated e-recycling centres. Many valuable materials like gold, cobalt, and lithium and rare-earth minerals can be recovered and recycled. Improper disposal can lead to leaking toxic chemicals in landfills or during incineration.



2

Reducing the energy consumption of our devices

Our mobile phones, computers, laptops, and other gadgets rely on energy to operate all the time. The electricity consumed by digital devices and infrastructures (data centres, networks) is growing rapidly. Data centre energy consumption specifically is growing at a rate that is significantly faster than the overall growth in global electricity demand (roughly 12–15% annually)¹⁸. This fast growth is driven by digitalization, cloud computing, and particularly the surge in Artificial Intelligence. The number and energy consumption of end-user devices influence the direct energy use and climate impact of the global ICT sector. There are many ways to minimise the energy consumption of our electronic devices. Here we provide a few simple steps that can be applied with minimal knowledge of electronics.

Use dark mode or lower screen brightness

Dark mode can reduce the screen power draw specially in OLED displays¹⁹. Effectively energy saving happens also when screen brightness on televisions and monitors is turned down. Set shorter times for screens to turn off automatically.

¹⁸ https://energy.ec.europa.eu/news/focus-data-centres-energy-hungry-challenge-2025-11-17_en

¹⁹ <https://dl.acm.org/doi/10.1145/3458864.3467682>

Master power settings

Enable “Eco-Mode” or “Battery Saver” as the device default setting.

Switch off devices during the night

Deactivate standby modes for TV boxes, wifi routers, laptops, mobile phones, etc during the night or during longer periods of inactivity. This can reduce “vampire” energy drain.

Deactivate GPS, WIFI and Bluetooth

They drain your battery, whenever possible switch them off.

Curb “phantom” energy loads

Many chargers and peripherals continue to draw power (vampire energy) even when the device isn’t connected or is fully charged. Physically disconnect idle tech and use smart power strips that automatically cut power to peripherals (monitors, printers, speakers) when the main computer is turned off.

3

Rethinking our online behaviour

Internet access has reached 60% of the global population, 6.04 billion people by October 2025, with the average user spending over 40% of their waking life on the Internet¹¹. Global social media user profiles now stand at 5.66 billion, with that figure equivalent to 68.7% of the global population. Social media and video streaming are the most widely consumed digital services followed by websurfing, music streaming, and video conferencing¹¹.

Be mindful of the internet traffic

Sending many emails a day, making calls on WhatsApp, uploading photos to the cloud, watching short viral clips on social media or our favourite series in streaming is just part of our digital daily life. For each individual it may be “just one picture” or “just a few minutes of video,” but, taken together, our collective Internet traffic has a tremendous environmental impact!

To be aware of your specific impact, use a web browser extension that provide real-time estimates of the CO2 generated by the websites you visit. The Green Web Foundation provides several free, open-source, tools for users and developers to help estimate the carbon footprint and emissions related to use of websites, apps, and software²⁰.

²⁰<https://www.thegreenwebfoundation.org/tools/#carbon-metrics>

ESSENTIAL DIGITAL HEADLINES

Overview of the adoption and use of connected devices and services



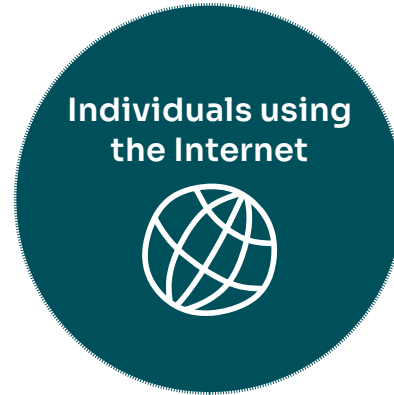
8.25
billion

Urbanisation
58.4%



5.78
billion

vs Population
70.1%



6.04
billion

vs Population
73.2%



5.66
billion

vs Population
68.7%



Average weekly time spent consuming online media by each Internet user

33H 27M



Percentage of users accessing the Internet via mobile phones

96%

YOY:-0.2% (-20 BPS)



Percentage of users accessing the Internet via laptops and desktops

59.6%

YOY:-5.1% (-320 BPS)

¹¹<https://datareportal.com/reports/digital-2026-global-overview-report>

What can we as users do to reduce unnecessary data transmission? Here we provide a list of concrete and actionable tips!

Reduce entertainment “data weight”

Video streaming accounts for the biggest data volumes sent over the Internet and is responsible for the majority (60-70%) of global internet data traffic²¹.

- **Download instead of stream:** download the media file on a hard drive whenever possible, to avoid overconsumption of video streaming.
- **Drop quality if possible:** choose a resolution that is sufficient for your screen/monitor. Lower the streaming resolution to 720p or 1080p on small screens where 4K is indistinguishable.
- **Turn off autoplay:** this can prevent energy waste from videos playing when you are not watching.
- **Not all streaming needs image:** streaming music, podcasts, ambient sounds, or familiar content don't necessarily require visuals. In these cases, turning off the video or even the screen can yield significant energy savings. Don't be tempted by the new video options for songs playing in music streaming services like Spotify or Deezer.

Reduce the number of Google and Google AI Overview searches

It is estimated that one Google search consumes the same amount of energy as turning on a 60W light bulb for about 18 seconds²². Sustainability experts on tech sector, estimate that Google AI Overview searches are possibly 10 times more costly than a traditional search result²³. When considering water usage, needed as a cooling mechanism in the data centres used to power these searches, the environmental impact becomes even more massive. And this is true for all forms of AI computing.

²¹ <https://en.reset.org/green-streaming-we-need-to-talk-about-netflix-prime-and-co>

²² <https://greenspector.com/en/search-engines>

²³ <https://matttutt.me/what-is-the-environmental-cost-of-googles-ai-overview-searches>

Bookmark the web pages you visit recurrently

Instead of browsing/searching again every time you need them.

Practice “Frugal AI” Usage

Billions of people now regularly turn to chatbots for help with homework, research, coding, or to create images and videos¹². AI use has been the most significant shift in our digital life since the creation of the internet and the advent of social media. Large Language Models (LLMs) consume significantly more power per query than standard search engines²³. Data centres accounted for around 1.5% of the world’s electricity consumption in 2024. With the growing demand for AI-related services this is set to more than double by 2030²⁴ driven by the construction of hyperscale, AI-focused data centres. A hyperscale, AI data centre can have a capacity of 100 MW or more, consuming as much electricity annually as 100.000 households. Here are a few tips to reduce the footprint of our AI use.

- **Use the right tool for the task:** a multi-billion parameter AI model is unnecessary for simple tasks like spell-checking or basic math. Use Small Language Models (SLMs) or traditional search when possible.
- **Write clear, concise prompts (minimise iteration):** vague prompts require the AI to process more data and generate longer, less relevant answers. Clear and direct prompts reduce energy consumption by minimizing necessary iterations.
- **Turn off automatic AI features:** disable AI-powered autofill in apps, or turn off integrated assistants features if you are not actively using them.

²⁴ <https://www.iea.org/reports/energy-and-ai>

- **How to stop Google's AI Overview:** a trick to prevent the AI Overview results in Google is to add -ai to the end of the query. E.g. a Google query should read “ how to save energy at home -ai”²³.
- **Stop Being “polite”:** using “please” and “thank you” adds unnecessary tokens to your prompt, slightly increasing the computing power required.
- **Don't get too dependent on AI:** just because you can use AI, doesn't mean you should or need it. For many tasks, a non-AI method is still good enough. Ask yourself if your question or research can be answered just as well, or even better, through a standard search engine, a book, article or technical paper.

Switch to more socially conscious and sustainable search engines

These alternatives are not only less carbon-intensive, but also better protect your privacy, and most importantly they do not force its users into adopting AI search results²⁵:

- Ecosia (<https://www.ecosia.org>)
- Lilo (<https://www.lilo.org>)
- Startpage (<https://www.startpage.com>)
- Ecogine (<https://ecogine.org>)
- YouCare (<https://youcare.world>)

²⁵ <https://www.searchenginejournal.com/alternative-search-engines-social-good/>

Prefer local processing (Edge Computing)

Relying on “the cloud” for every task means data must travel hundreds of miles to a data centre and back. Keep the work on your device. When possible, use software that processes data locally (on-device) rather than cloud-based web apps. This is faster, more private, and uses less network energy.

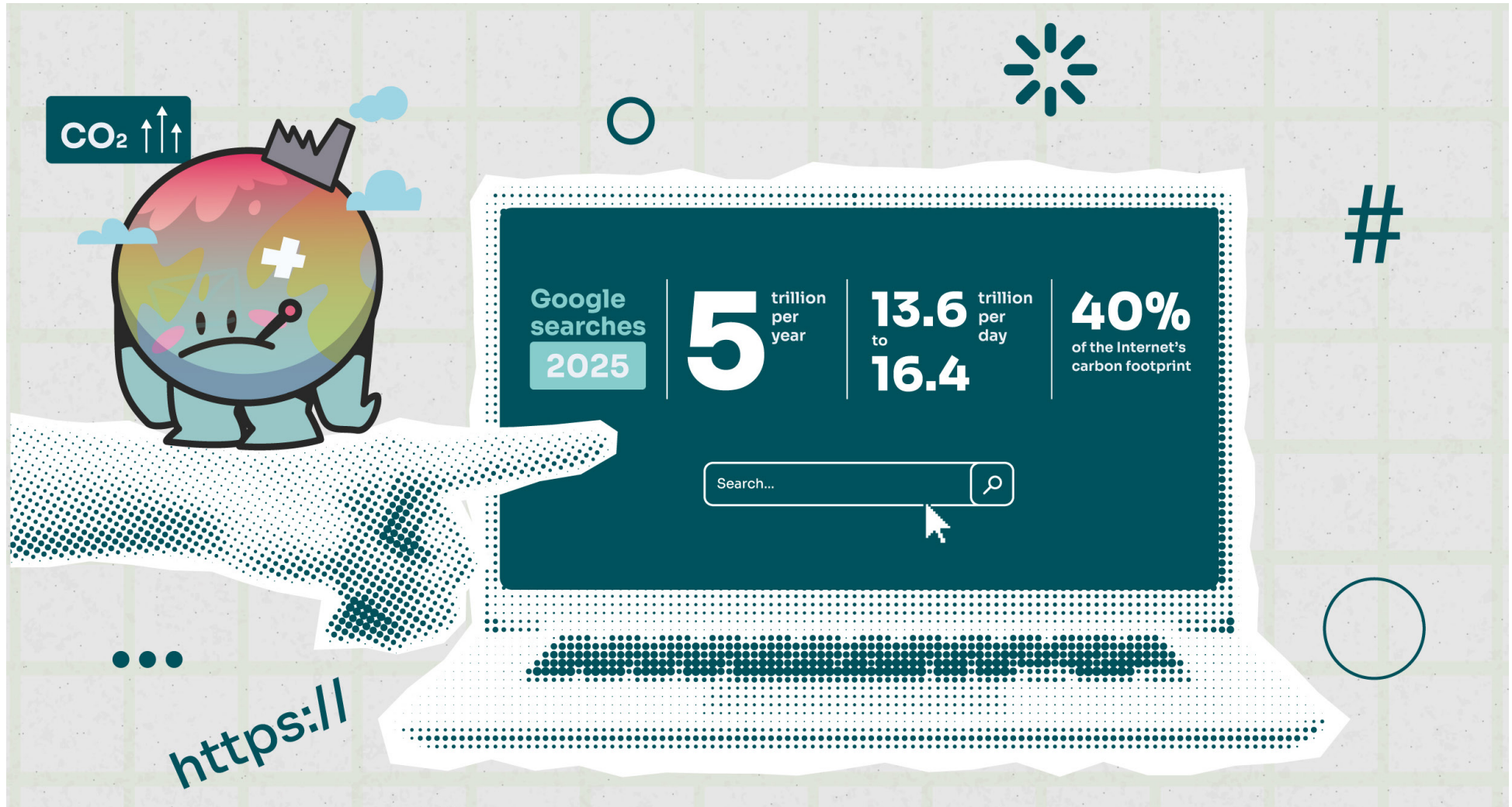
Choose Wi-Fi over cellular data

Transmitting data over cellular networks (4G/5G) is more energy-intensive than using a local Wi-Fi connection. Wait until you are on Wi-Fi to download large updates or sync photo libraries.

Turn off cellular data

For apps that don't need real-time updates.

Online search comes at a cost to our planet. In 2025, Google search continued to dominate the global internet, processing over 5 trillion searches per year, which averages to approximately 13.6 billion to 16.4 billion searches per day²⁶. This accounts for about 40% of the Internet's carbon footprint.



²⁶ <https://www.semrush.com/blog/google-search-statistics>

Adopt Mindful Email Habits

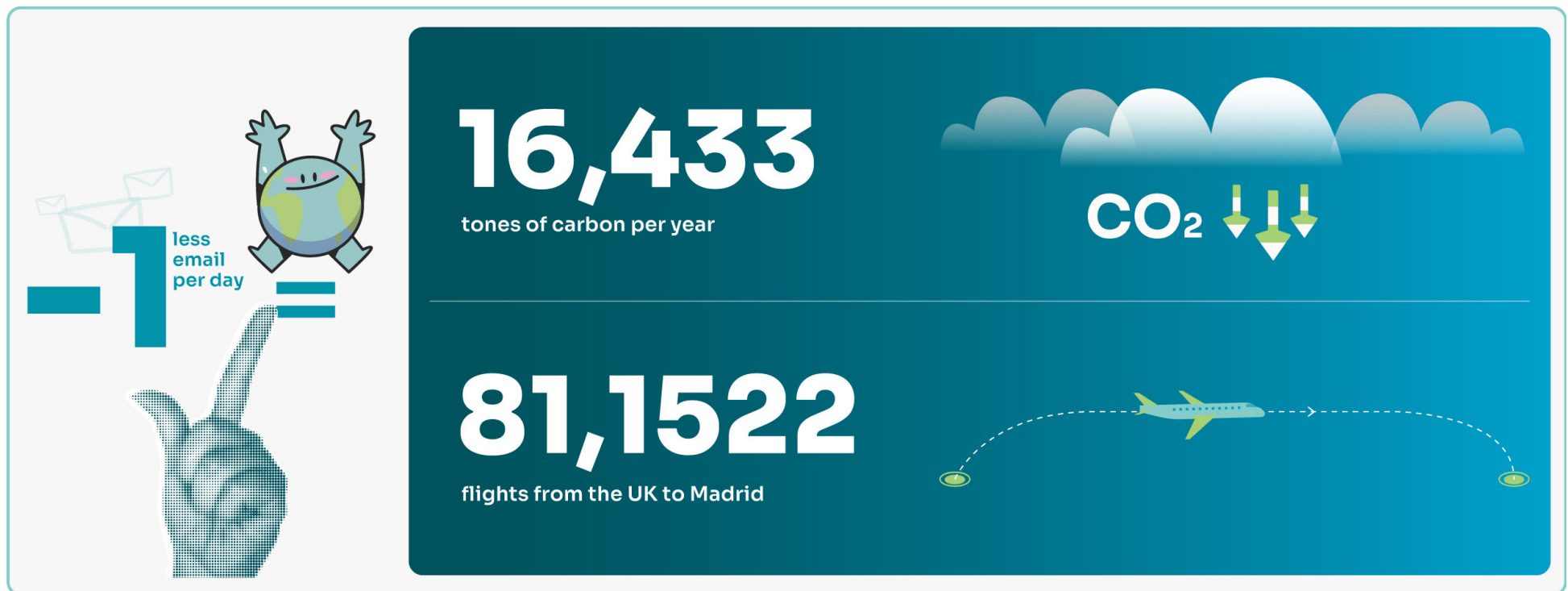
The average email is responsible for releasing an estimated average of 4 grams of CO₂ into the atmosphere. Add a big attachment, and it can go up to 50 grams²⁷. While a single email has a small footprint, the billions sent daily create massive, cumulative emissions. Even if you're just emailing colleagues across the office, that message travels thousands of miles through data centres, bouncing across servers and routers, a journey that consumes energy and water. Large attachments are particularly carbon-intensive because they are stored on multiple servers. Here are some recommendations to reduce our mailing footprint:

- **Avoid sending unnecessary emails and avoid sending emails to many people at the same time:** stop using “Reply All” for short acknowledgments.
- **Share links not files:** instead of sending large attachments, send a link to a shared file. Share photos on the cloud rather than sending duplicate versions by email or text message.
- **Think before you thank:** resist the urge to send one email with only a “thank you” message. Instead add a generic “Thank you or With Gratitude” sentence near the email signature, highlighting your intentional choice of sustainability over pleasantries.
- **Manage subscriptions:** reassess newsletter subscriptions and keep only those you actually read.
- **Turn off social media notifications:** deactivate notification emails from social networks, unless strictly necessary. Most of the time, they just duplicate information you already receive directly inside the network's website or app.
- **Search and destroy:** Once a month, scan your inbox for old, unnecessary emails that you can delete. Pay particular attention to those with bulky attachments.
- **Take out the trash:** Empty the Bin and Junk e-mail folder regularly. Some email programs do this automatically. Check the settings and choose a shorter storage period.

²⁷ <https://carbonliteracy.com/the-carbon-cost-of-an-email-2>

- **Choose a sustainable email provider:** there are now several email services that use 100% renewable energy sources, including Posteo.de, Mailbox.org, Runbox Tuta, and Infomaniak to name just a few. They also have an important bonus - they're free from advertising, meaning they protect users' privacy and don't track you online or sell data to third parties.

The carbon footprint of “Thank You” emails: in the UK an adult sending one less ‘thank you’ email a day, would save over 16,433 tonnes of carbon a year - the same as 81,152 flights from the UK to Madrid (numbers from 2019)²⁸.



²⁸ <https://www.weforum.org/stories/2019/12/with-thank-you-emails-polite-britons-burn-thousands-of-tonnes-of-carbon-a-year>

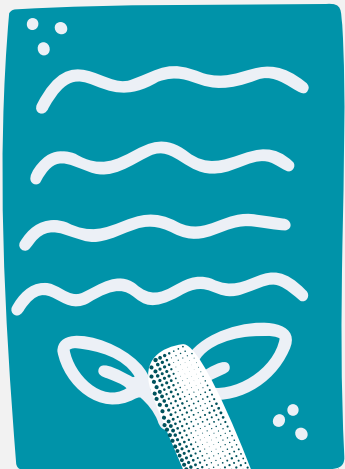
Practice digital decluttering (data sobriety)

Every gigabyte of data stored in the cloud lives on a physical server that requires 24/7 cooling and power. Minimize “Ghost Data”, regularly delete duplicate photos, old cloud backups, and unused apps. Use physical external hard drives for long-term archives instead of keeping everything “live” in the cloud.

Switch off and disconnect on a regular basis

Some digital detox is good for our mind and for our planet!

Disclaimer



Data (and technologies!) moves fast - sometimes faster than we can type. The information and statistics presented in this report are based on data available at the time of publication (May 2026). While every effort has been made to ensure the accuracy and reliability of the sources cited, please be advised that statistics, trends, and specially forecasts are subject to rapid and frequent change. Consequently, the findings herein represent a “snapshot in time” and may not reflect the most current developments or real-time shifts occurring after the date of publication. Sometimes there are significant variations, different sources provide different numbers and forecasts for exactly the same parameters, depending on the various assumptions and applied models. Whenever possible we provide ranges, citing multiple references.

Digital for Planet assumes no liability for any actions taken based on the information provided, and we recommend consulting real-time primary sources before making critical decisions.



About Digital for Planet

Digital for Planet –D4P– is a non-profit organization supporting the development and adoption of sustainable digital technologies and solutions for an equitable and sustainable development of our economy and society.

The increasing importance of digital technologies and solutions for the effective performance and growth of our economy and society is undeniable. On one hand digital technologies can accelerate decarbonization by allowing dematerialization and online delivery, substitution of transport and travel, as well as greater energy efficiency in production. Technology development has also positive effects, connected objects, robotics and artificial intelligence, to name a few, can help achieve the sustainable development goals and contribute to a more efficient use of available energy and natural resources. On another hand digital transformation also impacts the environment via manufacture of devices and energy consumption by data providers, storage facilities, networks, processors, and end-user devices. The ICT sector has a significant, growing environmental impact, contributing an estimated 1.5% to 4% of global greenhouse gas emissions, roughly comparable to the aviation industry. Key impacts include high energy consumption in data centres, raw material depletion for device production, and substantial e-waste containing toxic materials.

Society and ultimately, our planet's future depend on a growing community of individuals and organisations at work to develop sustainable digital technologies – and D4P is part of this community. Only by mobilising all stakeholders will it be possible to reduce the digital sector's carbon emissions and use tech for a green transition.

Join the growing community of organisations and individuals at work for sustainable digital innovation development and adoption. Contribute to the development of a digitally empowered and ethically responsible society.



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DIGITAL INNOVATION FOR A SUSTAINABLE FUTURE



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