

# 10 Ways to Reduce Your Digital Carbon Footprint

OUR INTERNET ACTIVITIES PRODUCE SIGNIFICANT GREENHOUSE GAS EMISSIONS. THESE 10 TOOLS MINIMIZE THEIR IMPACT.

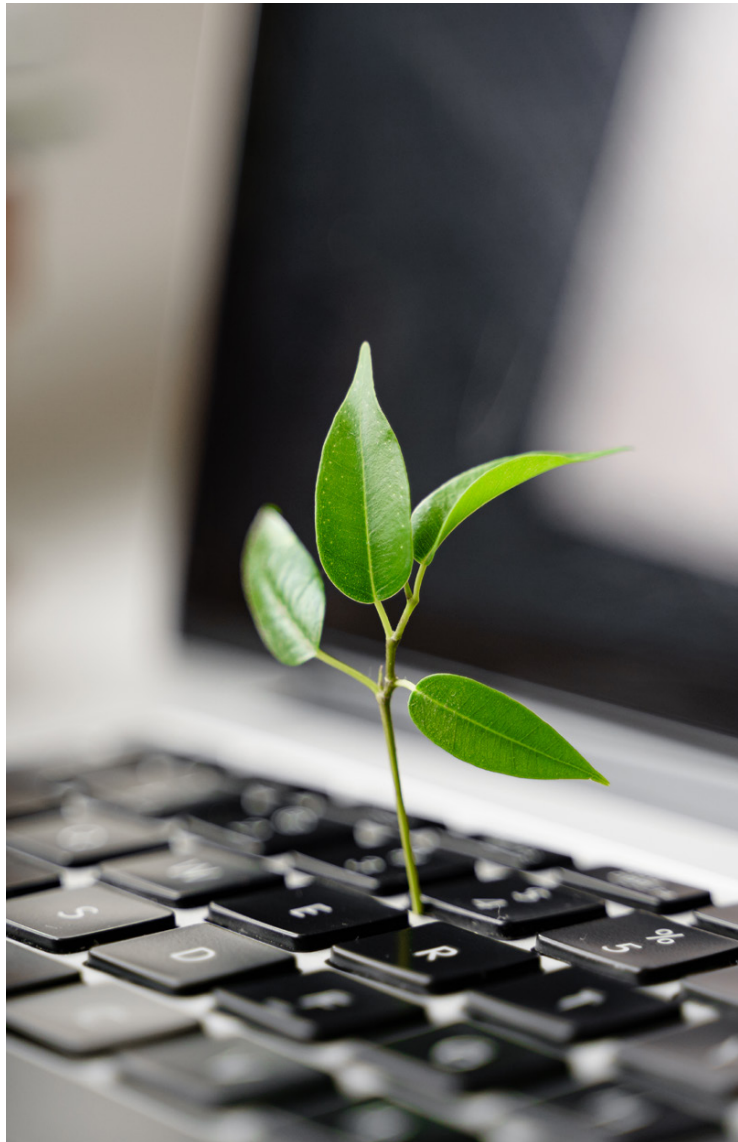
BY SANDI SCHWARTZ



Our lives are increasingly digital, whether we are working, managing our home and family or being entertained. The average person spends 6.5 hours on the internet every single day, according to the Global Web Index.

But most of us don't realize that our online activities contribute to energy usage and carbon emissions, which impact climate change. The information and communication technology (ICT) sector is responsible for 7% of global electricity consumption and is expected to rise in coming years. For reference, this is a bigger chunk than what's produced by the global airline industry.

Every click, search, download, streamed video and email sent contributes to your personal digital carbon footprint. "The digital carbon footprint refers to the greenhouse gas emissions generated by digital activities," explains Thomas Jackson, professor of information and knowledge management at Loughborough University in the United Kingdom, whose research is at the frontline of tackling our digital carbon footprint. "These [activities] include the energy consumption of data centers, devices and digital infrastructures required for data processing and storage."



TROYAN/SHUTTERSTOCK.COM

Here are 10 tips that help to reduce your digital carbon footprint both at home and in the office.

## 1. DELETE FILES, ESPECIALLY PHOTOS AND VIDEOS

Never deleting electronic files, such as images and documents, from cloud storage services can be problematic, says Jackson. Many photos and videos hog a lot of storage space. Take the time every few weeks or months to go through your saved files and purge those you no longer need. Jackson especially recommends identifying and deleting redundant data.

## 2. UNPLUG DEVICES WHEN NOT IN USE

Leaving devices like phones and laptops plugged in unnecessarily can increase your energy consumption without realizing it, says Jackson. When electronics are plugged in, they still consume electricity even when they are turned off or in standby mode. Known as "vampire draw," this phenomenon is responsible for an estimated 10% of the total energy consumption in an average American household.

## 3. ADJUST YOUR VIDEO STREAMING HABITS

Watching all those videos and television shows requires an entire system of networks, devices and data centers that consume an exorbitant amount of energy. In fact, a 2022 report by the Shift Project found that online video streaming accounts for an estimated 60% of global internet traffic. "Reduce video streaming quality when high definition is unnecessary," advises Jackson. Another tip is to play songs as audio files instead of streaming them as YouTube videos.

## 4. RESEARCH WHERE YOUR DATA IS STORED

"Where your data is stored matters significantly," says Jackson. Many data centers are located in areas prone to flooding or climate change or use fossil fuels for power and cooling. He recommends choosing energy-efficient servers and encouraging green IT practices at work when possible. If you're not sure where and how your data is stored and the energy consumption involved, ask your provider or do an internet search.

## 5. REDUCE DARK DATA

Dark data is "data that is used once and then forgotten but remains in data storage," according to an article in *The Chronicle of Higher Education* highlighting Jackson's work. As the article points out, "smart devices from thermostats to trackers, are a large contributor to this kind of data." IBM estimates that up to 90% of sensor data collected from smart devices is not used. Companies

should audit and reduce dark data. As a consumer, you can help by deleting data you no longer need. That could mean removing outdated information from your smartwatch or keeping just one perfect picture of your family at the beach and deleting the six other nearly identical shots.

## 6. CONTROL EMAILS

We are constantly inundated with emails pertaining to both our personal and professional lives. An estimated 347 billion emails are sent each day globally, with the average person receiving about 120 emails per day, according to data from Venngage. Help minimize your footprint by keeping up with your email inbox; regularly delete unnecessary emails, remove spam emails and carefully consider how many newsletters you subscribe to. Jackson also recommends doing what you can to reduce email traffic. That might mean actually picking up the phone instead!

## 7. USE AI RESPONSIBLY

Jackson warns that using AI, such as ChatGPT, for simple tasks can consume too much energy. For instance, Microsoft's CO2 emissions have gone up nearly 30% between 2020 and 2024, and Google's greenhouse gas emissions have gone up almost 50% between 2019 and 2023 due to expansion tied to running AI data centers.

While most of the impact comes from training the models, we can engage in responsible data management practices when it comes to AI. Ask yourself if you really need to use an AI tool for a particular task and try not to hang onto that data for too long since it takes up storage space. A ChatGPT query uses about 10 times the energy of a Google search.

## 8. VOTE WITH YOUR DOLLARS

"[T]he biggest lever you have is who you buy from," says Ty Colman, co-founder and chief revenue officer of Optera, an environmental, social and governance

(ESG) and carbon management software provider. He suggests looking at where your biggest buckets of dollars are going and asking if those companies are aligned with the environmental impact you want to have.

"There are certain organizations that provide the information that a consumer [wants]," he says. "[T]here's [also] data that can be extracted from those organizations and used to inform those calculations for things like your cloud services or your other app purchases." He suggests visiting corporate websites to find details such as their ESG report.

## 9. BE MORE MINDFUL WITH YOUR DIGITAL TIME

While this may sound basic (yet hard to do), limiting the amount of time you spend mindlessly scrolling social media and Google search results can help put a dent in your digital carbon footprint. [Here's a list](#) of the most carbon-intensive social media outlets, with TikTok at the top.

## 10. TRACK YOUR DIGITAL CARBON FOOTPRINT

If you are interested in taking the next step to track your digital carbon footprint, here are some helpful resources to explore.

- Jackson and his team developed a Digital Decarbonization Toolkit that includes a data carbon calculator and data carbon scorecard.
- Colman recommends checking out Wholegrain Digital's Website Carbon Calculator to estimate the carbon footprint of your website.
- The Digital Emissions Calculator by Small99 is another helpful tool. ◆

SCHWARTZ IS THE AUTHOR OF THE BOOK *FINDING ECOHAPPINESS* AND A FREELANCE JOURNALIST WITH 25 YEARS OF EXPERIENCE WRITING ABOUT SUSTAINABILITY, NATURE, WELLNESS, LIFESTYLE AND MORE.