

DIGITAL CLEAN UP: lighten your invisible footprint!

What is Internet pollution ?

Internet pollution, or the impact of the Internet on ecology is simply **pollution caused by its operation**. For many, the Internet is synonymous with dematerialisation. Yet, far from being dematerialized, the Internet is based on a physical infrastructure. Indeed, a whole **network of cables, data centers and servers** underpin the functioning of the Internet. Internet energy and carbon footprint are estimated to exceed those of travel.

Did you know ?

The total amount of **greenhouse gases** produced to directly and indirectly support human activities, usually expressed in equivalent tons of **carbon dioxide (CO₂)**

It is possible to **reduce our carbon footprint**.

Daily actions as simple as sending emails, surfing the Internet, using search engines or storing data are therefore a real cost for the environment.

Where does the invisible "waste" of the Internet come from ?

MANUFACTURING AND SHIPPING of Internet's hardware
+
 POWERING AND COOLING of servers, computes, and smartphones

1 MB email = 60 W lamp lit for 25 min

A one-megabyte email during its total life cycle emits **20 g of CO₂**, i.e. the equivalent of a lamp lit for 25 minutes.

One of the main forms of digital pollution is called **"dormant pollution"**. It's due to the storage of emails. All emails stored in a mailbox make many servers run uninterruptedly in data centers. However, data centers are very energy intensive and need to be permanently air conditioned to be cooled. Thus, **data storage makes turn the equivalent of five nuclear power plants** in the world! And this is just the beginning... Indeed, the volume of stored data doubles every two years.

How can I reduce my digital footprint?

20 emails a day over one year = 1000 km

20 emails a day per user over one year, create the **same CO₂ emissions** as a car traveling 1000 km. In one hour, more than twelve billion emails are sent, representing more than 4,000 tonnes of oil.

- ✓ **Compress the size** of the documents you send by email to decrease the weight of the message;
- ✓ **Use hyperlinks** rather than attachments;
- ✓ **Avoid email signatures**, especially images that weigh down mailings;
- ✓ **Don't spread chain mail**, petitions, humorous images, fakes, etc.;
- ✓ Regularly **delete emails that have been dealt with**, and don't forget to empty the trash bin;
- ✓ **Unsubscribe from newsletters** you don't read;
- ✓ **Limit "reply ALL"**, send fewer emails and limit the number of recipients;
- ✓ **Talk in person** rather than over email
- ✓ **Enter the url of a website** if you know it rather than going through a search engine;
- ✓ **Cut down on the number of pages** you view by **using specific keywords**;
- ✓ **Make your regularly viewed websites favourites**;
- ✓ **Make regular use of your smartphone's optimisation** feature that stops apps running in the background.

Google

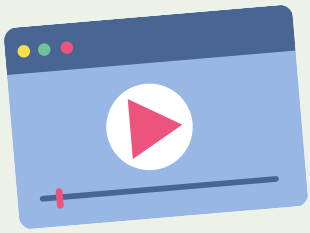


Google Search I'm Feeling Lucky

One search on Google = 0,2 to 7 grams of CO₂

Every online search comes at a cost to the planet. In processing 3.5 billion searches a day, Google accounts for about **40% of the Internet's carbon footprint**.

Sending dozens of emails a day, making a quick call on WhatsApp, uploading some photos to the cloud, watching a short viral clip on YouTube or your favourite series in streaming: It's all part of the digital daily life around the world. For the individual, it may be "just one photo" or "just a few minutes of video," but, taken together, **our collective internet traffic contributes enormously to climate change.**



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10 hours HD video

all the English-language articles

Ten hours of high-definitions film consume more bits and bytes than all the English-language articles in Wikipedia put together. In 2018, online video traffic was responsible for more than **300 million tonnes of CO₂**, equivalent to what a country the size of Spain releases in a year.



The largest share of that growth is now video traffic: **80% of all data transferred online is video data**, with nearly 60% of that being online video, meaning streaming videos stored on a server and viewed remotely, via streaming platforms. Every day, **people watch more than a billion hours** of video on YouTube.

How can I reduce my digital footprint?



Is there a particular song you love? A video recipe that you follow often or your favourite workout video?

✓ **Downloading the file is the best option.** You only use the data once, and you can replay the song or the video indefinitely!

✓ **Avoid over-consuming video streaming.**

Furthermore, you can:

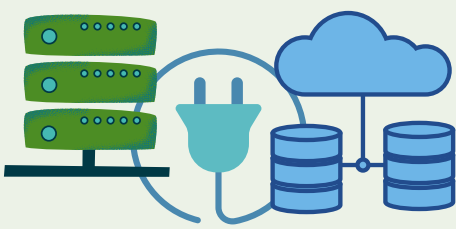
✓ **Store your files on your hard-disk**, be reasonable with the "Cloud" and online storage;

✓ **Some providers are run completely on renewable energy sources.** Consider **storing your data on a green cloud provider**;

✓ **Always shut down your computer and unplug chargers**;

✓ **Set sleep mode** on your device after a certain number of minutes;

✓ **Keep your laptop and other digital equipment for longer periods.**



The **information communications and technology** industry - which delivers Internet, video, voice, and other cloud services - produces more than **830 millions tons of carbon dioxide** annually. That's about 2% of global CO₂ emissions.



What can I do during the EWWR?

ORGANIZE A DIGITAL CLEAN-UP AT YOUR WORKPLACE!

Now that you are aware of your digital footprint, **what can you do to take action?** Can you imagine the global impact of millions of organisations sending hundreds of billions of emails and storing billions gigabytes of data every second?

No matter if you are a huge company, a school, administration or a non-profit organisation, if you work using the Internet everyday, you can definitely **do your part to reduce your CO₂ emissions!**

Follow these 4 steps to **lighten your invisible footprint:**

1 PROPOSE THE INITIATIVE TO YOUR COLLEAGUES AND **SET A DAY**

2 REGISTER YOUR ACTION ON www.ewwr.eu

3 SHARE THE INFORMATION ABOUT THE CARBON FOOTPRINT OF INTERNET AND DISCUSS ABOUT IT WITH YOUR TEAM

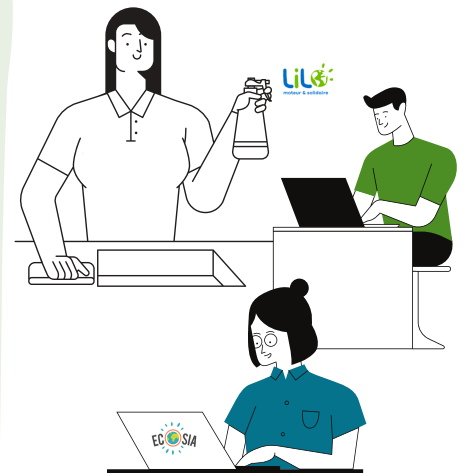
4 START THE CLEAN-UP your personal and professional mailbox!

Some tips

👉 **Download a browser that offsets the environmental impact** (e.g. **Ecosia** - the search engine that plants trees **Lilo** - which finances the environmental projects of your choice - e.g. protecting marine life)

👉 **Turn off video autoplay** on social networks and websites

👉 **Clean your Cloud:** delete the files you don't use anymore



Join us for the EWWR!

www.ewwr.eu

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DON'T YOU FEEL LIGHTER ALREADY?

Sources:

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<https://www.dw.com/en/is-netflix-bad-for-the-environment-how-streaming-video-contributes-to-climate-change/a-49556716>
<https://www.energiguide.be/en/questions-answers/do-i-emit-co2-when-i-surf-the-internet/69/>
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