



YOUR BUSINESS AND GREEN IT

Invest in Responsible Digital Technology



greenly

Introduction

At Greenly, we are convinced that whatever the size of the company, start-up, SME or large group, the willingness to invest in Responsible Digital Technology will set you apart from your competition.

What exactly is digital responsibility?

IT emissions currently represent 5% of global emissions, and they're growing rapidly. By 2030, they are estimated to represent 10% of total emissions. But where is this all coming from?

66 %

from terminals

19 %

from networks

15 %

from data centers



Alexis **Normand**
Greenly CEO

“

“The immaterial aspect of digital technology makes us tend to forget how much it affects the environment.

Green IT refers to all types of information technology (ICT) that can reduce harmful effects of human activity on the environment.

There are many strategies available that can be easily implemented. For example, the new Green IT solution helps to accurately measure the impact of a company's digital activity: including terminals, data centers and web services.

Think about it!”

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According to researcher Gerhard Fettweis, the 2030 estimate for energy consumed by the internet alone will reach the same level as the 2008 global energy consumption of all sectors combined.

The carbon footprint of the digital sector is becoming increasingly significant, and the United Kingdom has committed to becoming carbon-neutral by 2050. This will impact the digital activities of all companies.

Green IT: how to cut down on digital waste in your company?

Greenly offers you a structured approach adapted to your sector and your company size, organized into 3 parts:

Measuring your environmental impact with our tools for:

- cloud,
- data centers,
- digital services,
- hardware,
- online advertising ...

Identifying optimization levers.

Deploying an action plan by mobilizing stakeholders.

With this white paper, we'll work together on finding you an accessible methodology, regardless of your situation or sector.

By raising awareness throughout your whole organisation, you will be prepared for changes in legislation, while having a positive impact on the environment.

Greenly will be by your side in the deployment of your Green IT strategy, by measuring all your digital activities in order to deploy an action plan that's in line with your operational objectives.



Over 1000 companies have already entrusted in Greenly for their Carbon Footprint reporting





**DO YOU KNOW
YOUR CARBON
EMISSIONS?**

1

5 reasons to go Green IT



1

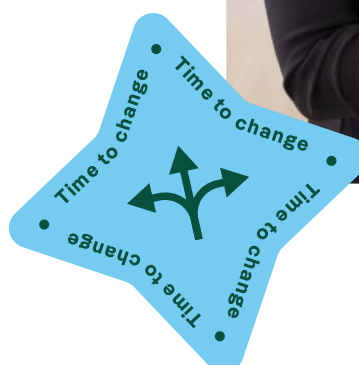
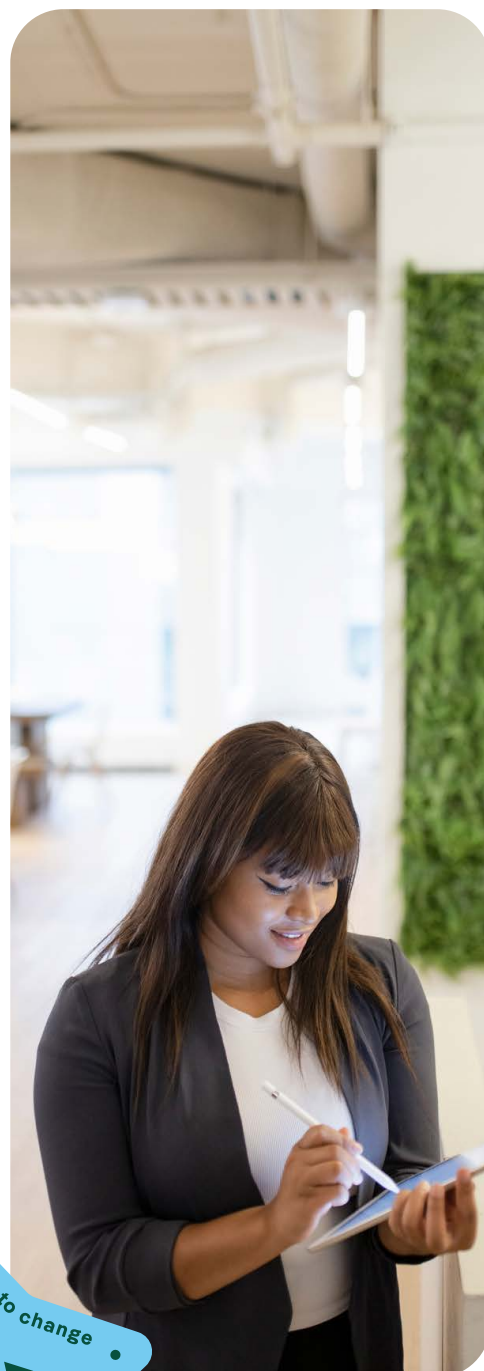
Give your company a competitive advantage

Digital services that are transparent about their low-carbon emissions are a vital selling point, especially for large groups. This can also be used in brand marketing, to meet employee expectations beyond regulatory changes.

2

To improve your environmental impact

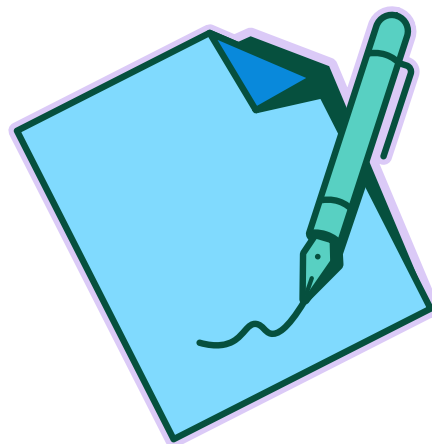
The digital sector produces a large part of the world's carbon emissions. Additionally, the extraction of raw materials and consumption of fresh water during their production causes enormous environmental damage.



3

It's easy to get involved

Greenly can analyze your environmental impact based on documents you provide us, such as computer inventories and detailed invoices provided by cloud service providers. This allows us to independently calculate your carbon footprint throughout the year.



4

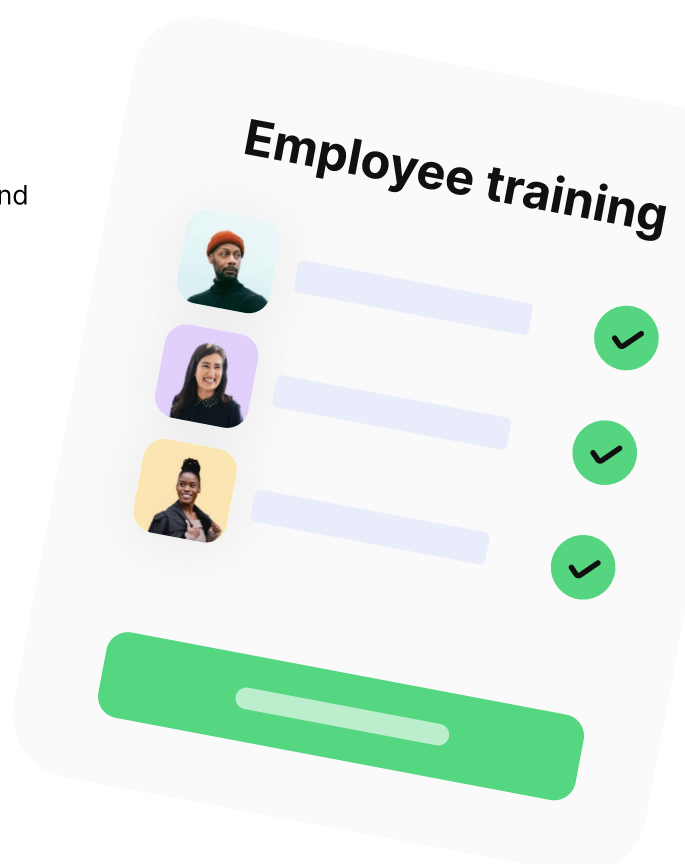
It's easy to reduce your emissions

Once the assessment is complete, we can get started on an action plan. Our technical and operational solutions such as relocating cloud storage, using more frugal computing, and changing the storage mode can all be deployed quickly, and have an enormous impact in reducing your emissions.

5

Involve the whole team and stand out from the rest

Involve your employers and sellers, and share results with your customers.



2

As simple as Greenly



Leading businesses across industries trust Greenly to make their carbon management simpler, smarter and easier.



“

We chose Greenly because of their unique tech expertise. No other player showed the same capacity to integrate seamlessly with all our data sources. Now, we can live stream GHG emissions metrics at instance level, to optimize data center footprint according by vCPU, workload or energy sources. I truly believe this super insightful utility/carbon data analytics can change digital infrastructure markets for the better.

Bethany Gorham

Head of ESG at Stack / IP Partners



EASYVISTA™

“

The Greenly platform has perfectly met my expectations: to engage my company in its low-carbon strategy, while avoiding the need to perform a new GHG assessment every year, thanks to the automated monitoring. I was impressed by the degree of granularity of the analyses, especially for the digital sector: the analyses identified very important emission reduction levers that are both actionable and operational.

I recommend all companies to adopt the Greenly tool to simply reduce their emissions.

Sylvain GAUTHIER,

CEO of Easy Vista, a specialist in IT management for large groups

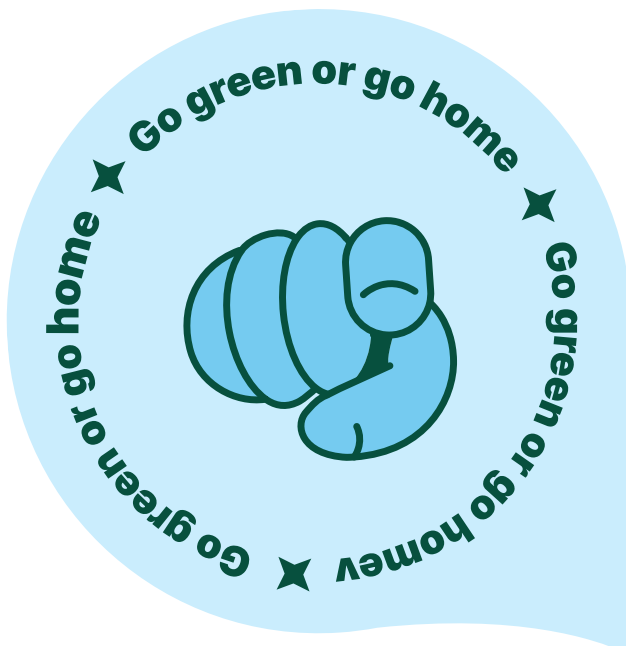
The carbon footprint of digital activities represents about 5% of total global emissions. This represents 2 Giga tons of CO₂, and this figure is still rising. To put this in perspective, digital activities emit a mass of carbon into the atmosphere equivalent to the weight of more than 200,000 Big Bens. To sequester all this carbon, we would need to cover a third of the world's land surface with a mature forest...

Luckily, there are solutions to deploy a responsible digital policy in your company and considerably reduce your environmental impact.



Alexis **Normand**
Greenly CEO

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Today, barely 20% of companies' carbon emissions are tracked and managed, and this mainly concerns large groups that allocate budgets exceeding \$16,000 by using consulting firms. SMEs are reluctant to carry out their carbon footprint due to a lack of financial and human resources. In this context, it is impossible to comply to the Paris Agreements to limit global warming or reach Net Zero by 2050. A digital solution like Greenly allows all SMEs to track their emissions, and thus align their business trajectory with the climate targets. It is thanks to this type of tool that we will be able to generalize carbon footprints to all companies

3

Responsible Digital Technology

Where do I start?



You and the green economy

- Did you know that the 2050 global GHG objective is to reduce emissions by a factor of 4?
- Did you know that the companies with the best environmental, social and governance results are also those with the highest financial performance?
- Are your clients companies? If so, your emissions are part of scope 3 on their balance sheet, they depend on you to reduce their emissions!
- Are your customers committed to the climate?
- Are your competitors committed to the climate? Then it's time to develop a competitive advantage by being a pioneer on the subject!

You, HR, communication, purchases...

- Are your employees interested in responsible companies with an environmental commitment?
- Are you starting to notice other companies increase their "Green IT" criteria when choosing company equipment?
- Are you aware of recent innovations in data storage solutions?
- Have you already made your employees aware of the proper use of digital technology?



You and your digitally responsible approach

- Did you know that there is a specific carbon assessment for digital companies, which allows you to evaluate your carbon emissions on a regular basis?
- Are you aware of the significance of the consequences of digital emissions?
- Are you aware of the degree of emissions that IT gives off, and how much you have to gain by acting now?
- Do you know where your IT emissions are in the company? Can you quantify them?
- Do you integrate the dimension of data storage in your approach?
- Do you know that there are solutions to drastically reduce the environmental impact of your data storage?
- How do you choose your equipment? Do you consider the reparability of devices? Recycling? Do you consider their consumption?
- Do you recycle everything that can be recycled?
- Have you set up a charter for the proper use of digital technology?
- Do you regularly raise awareness among your employees to limit the number of e-mails or recipients, or to reduce storage?
- Have you already implemented a carbon contribution policy (financing eco-projects, reforestation, etc.)?



DO YOU KNOW
YOUR CARBON
EMISSIONS?

4 Deploying a responsible digital technology policy for your company



Beyond the Carbon Assessment, Greenly offers you a continuous improvement approach

With the Greenly Corporate Impact software program, Greenly helps you to carry out your carbon footprint analysis, with a digitized and economical carbon assessment. It is now possible to go beyond a traditional carbon assessment, with the new optional solution proposed by Greenly to calculate and measure your digital footprint. It provides a clear analysis on the emissions related to the digital aspects of your company. The methodology is based on your invoices, which identify all the machines and devices you use for digital purposes. Greenly relies on the company's data by establishing a dashboard, which automates the collection and analysis of numerous secure data. This measurement is carried out on a regular basis to act on the right levers at the right time. With these personalized results, you will identify the priority areas and solutions to effectively reduce emissions. Greenly experts are working to bring more and more digitized and accurate solutions.



Carbon Footprint

27 tCO₂e
Total emissions



Distribution

27
KgCO₂

Expense Data

Date

Label

A 5-step Method

5

1

MEASURE

"You're off to a great start! You will soon have a carbon footprint for your company"

Thanks to its R&D support, Greenly uses the most recent emission factors to make an exhaustive analysis of your digital emissions (inventory of your terminals, measurement of your emissions from data centers, advertisements, web content...)

Extract from the Accounting Entries (AE)

- Fixed assets (account 200)
- Supplier expenditure (account 400)
- Expenses (account 600)

Integrate other specific data (electricity, cloud services...)

- Employee questionnaires
- Invoice analysis
- Life Cycle Analysis



The platform is connected! The process is launched!

2

HOW?

Identify your reduction levers

How to act?

From the carbon footprint, Greenly identifies the levers for optimization"
Based on the analysis, Greenly proposes customized action plans: Act on storage, data transfer calculation, digital service providers, IT equipment...

Communicate your results throughout the process

Automatic monitoring of emissions

- 1 Scope 1 : direct
- 2 Scope 2 : indirect energy
- 3 Scope 3 : indirect non-energy

A 5-step Method

5

3

I HAVE A PLAN

Implement an action plan

Using your carbon footprint to define an action plan

"You have an action plan"

Identify stakeholders who can implement the actions and organize "action plan" workshops

Certified



Net Zero Contributor

4

CONTRIBUTE

Contribute to carbon neutrality

"You act for the environment".

You can finance certified projects, label your company, and aim for carbon neutrality



Gold Standard

5

MONITOR

Follow up for continued improvement

"You are in an improvement process that you monitor regularly"

Greenly provides you with tools that allow you to continuously monitor your emissions in order to evaluate the impact of your action plans



And Greenly will support you for a year with its hotline!

5 What to act on?

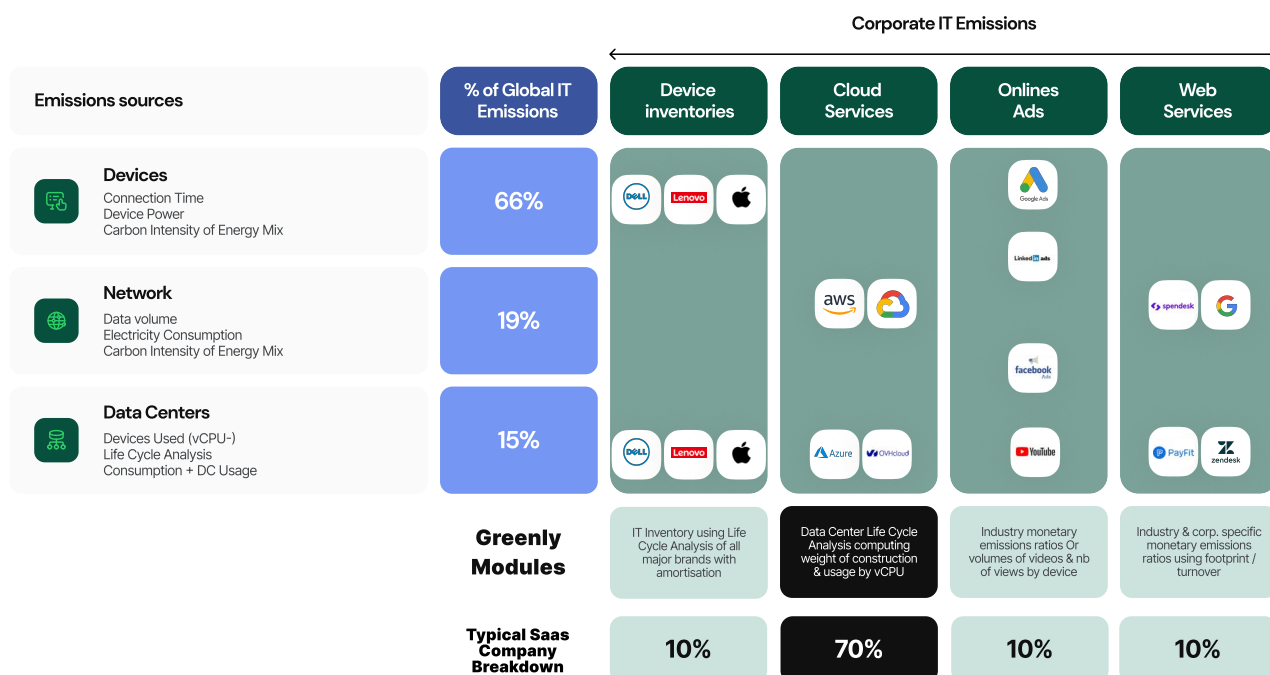


"It is possible to reduce emissions by up to 70%".

- Optimize the energy efficiency of cloud services: Find the energy solutions with the lowest cost and optimize computing capacity
- Reduce the carbon intensity of the energy used by choosing to use cloud computing services in countries where the energy mix is less carbon intensive.
- Most of Amazon's data centers are in Ireland - where 1 kWh of energy generates more than 300 grams of CO2, compared to less than 50 in France or Norway.



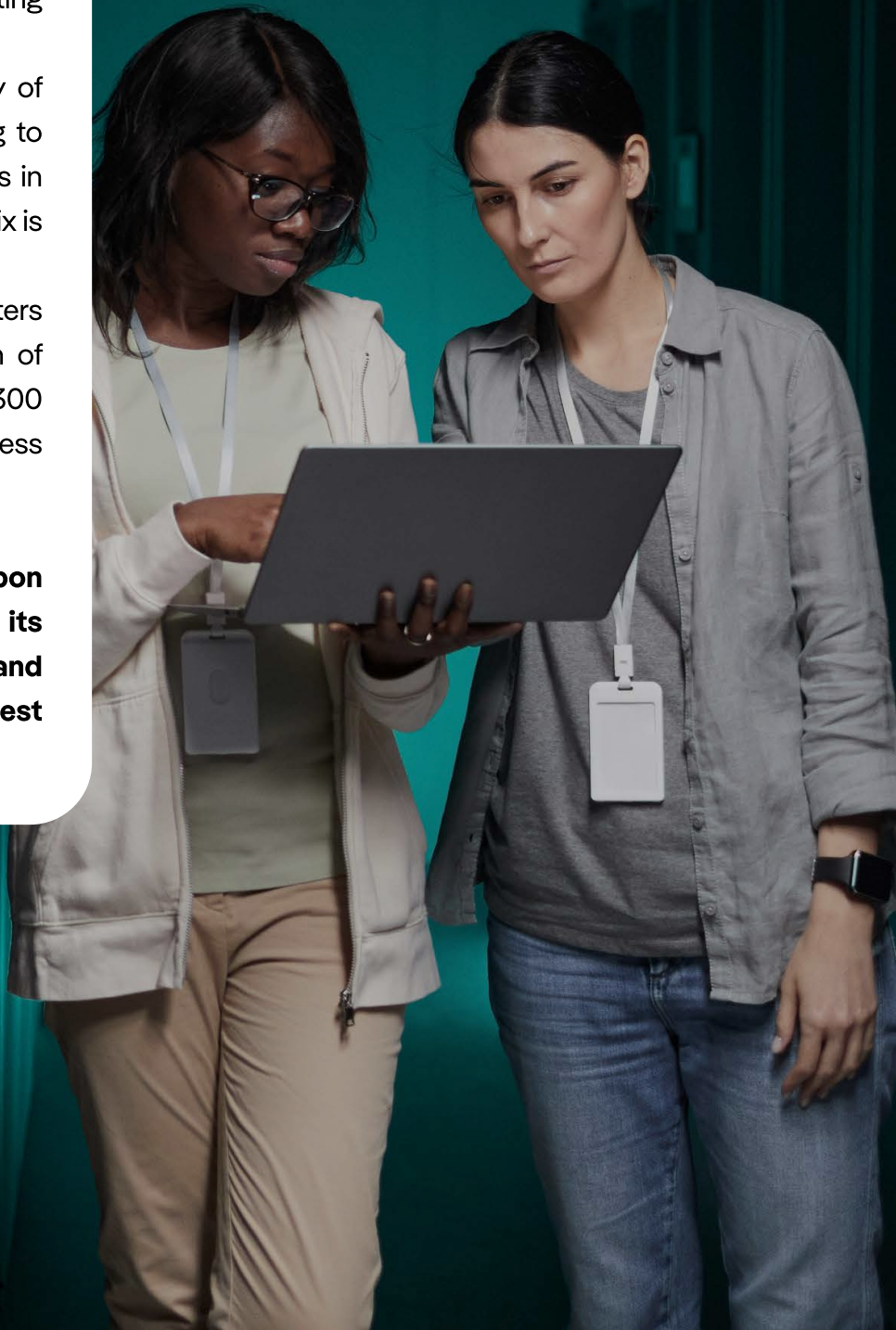
Notice your impact



Identify its reduction levers

- Optimize the energy efficiency of cloud services: Find the energy solutions with the lowest cost and optimize computing capacity
- Reduce the carbon intensity of the energy used by choosing to use cloud computing services in countries where the energy mix is less carbon intensive.
- Most of Amazon's data centers are in Ireland - where 1 kWh of energy generates more than 300 grams of CO₂, compared to less than 50 in France or Norway.

Greenly offers a digital carbon footprint analysis with its "Green Web Services", and guides you towards the best solutions!



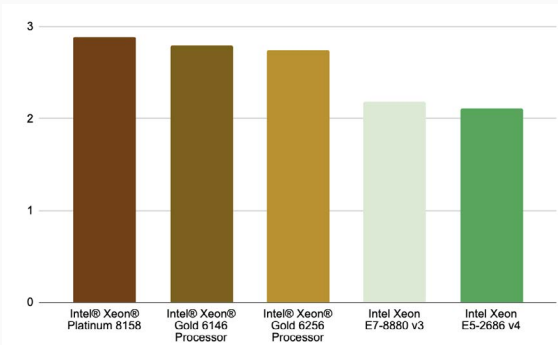
A precise measurement for effective reductions

Use all the levers to reduce digital emissions

DEVICE CHOICE

Not all storage and computational devices have the same electricity consumption.

Energy consumption per billion operation (Wh/Ghz)

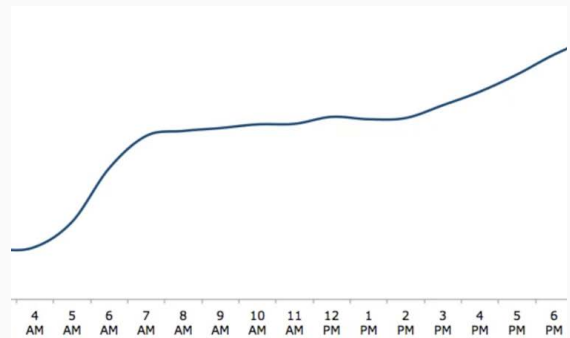


Up to 25% reduction

USAGE

Average server & network use drops to less than 50% compared to peak capacity hours

U.S mobile app usage

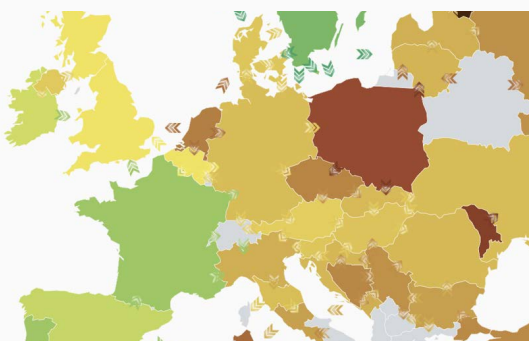


Up to 25% reduction

LOCATION

Carbon intensity of electricity is strongly dependant on geographical location.

Carbon intensity of electricity by Network

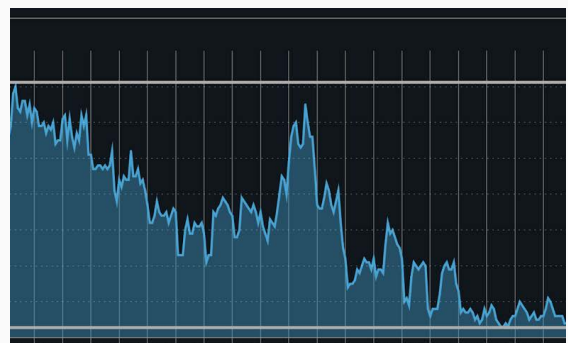


Up to 25% reduction

TIME

Carbon intensity of electricity varies during the day, and from one day to another.

Carbon intensity of



Up to 25% reduction

Purchases / equipment

Manufacturing of IT products generates significant energy and water consumption, and continues to be a problem during the product's life. This is something important to consider during purchases. Electricity production is the first CO2 emitting sector in the world, with 41% of the emissions due to energy combustion, far ahead of transport (25%)

Uses

In your company, everyone can take part in reducing the amount of data stored and optimize use on the web!

Greenly gives you the keys to engage your employees in this process

For a digital company, **digital services account for 50% of carbon emissions**, half of which is due to cloud computing. The digital sector requires a lot of energy to operate, and is a major consumer of non-renewable natural resources.

More or less energy consuming equipment

Equipment	Energy Consumption
Smartphone	2-7 kWh/year
Tablet	5-15 kWh/year
Screen	20-100 kWh/year
Laptop computer	30-100 kWh/year
Desktop computer	120-250 kWh/year
Box (Internet + TV)	150-300 kWh/year

With Greenly's expertise, we can help guide your choices!



6

Understanding responsible digital figures, and how to enact them where it matters most.



Manage your data better .

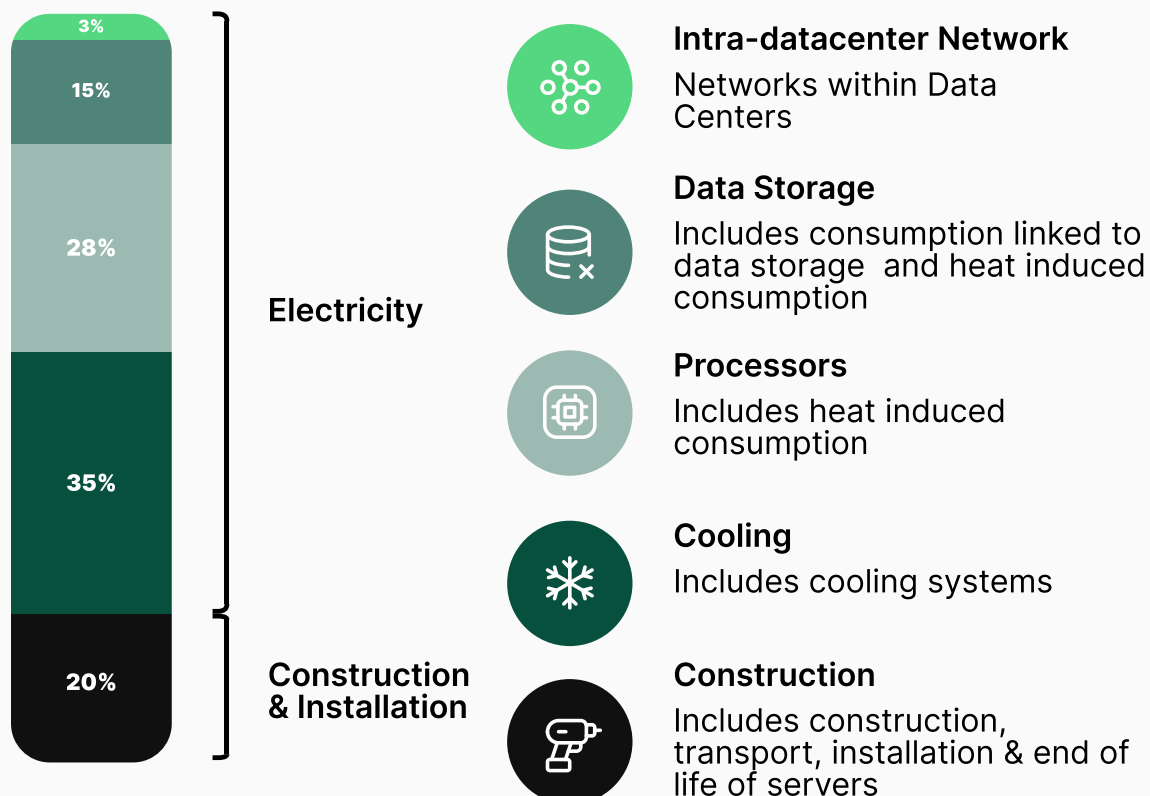
Each year, we produce more than 4,000 GB of data, while a single GB of data represents 6 shelves of books!

Emissions from the cloud currently represent

200 Mt of CO₂

or 0.5% of global emissions

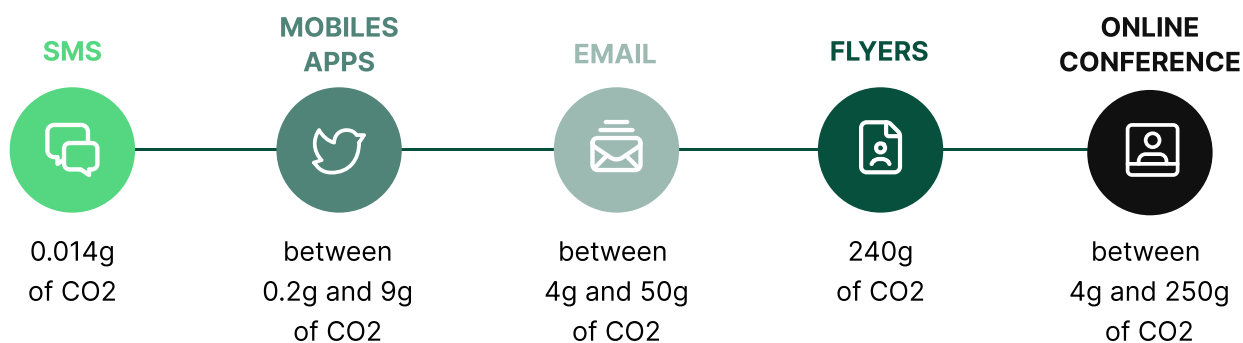
Typical breakdown of cloud induced GHG Emissions



2/3 of carbon emissions in the digital industry are due to the manufacturing of terminals (computers, smartphones, but also data centers). The rest of the emissions are divided between networks and data centers.

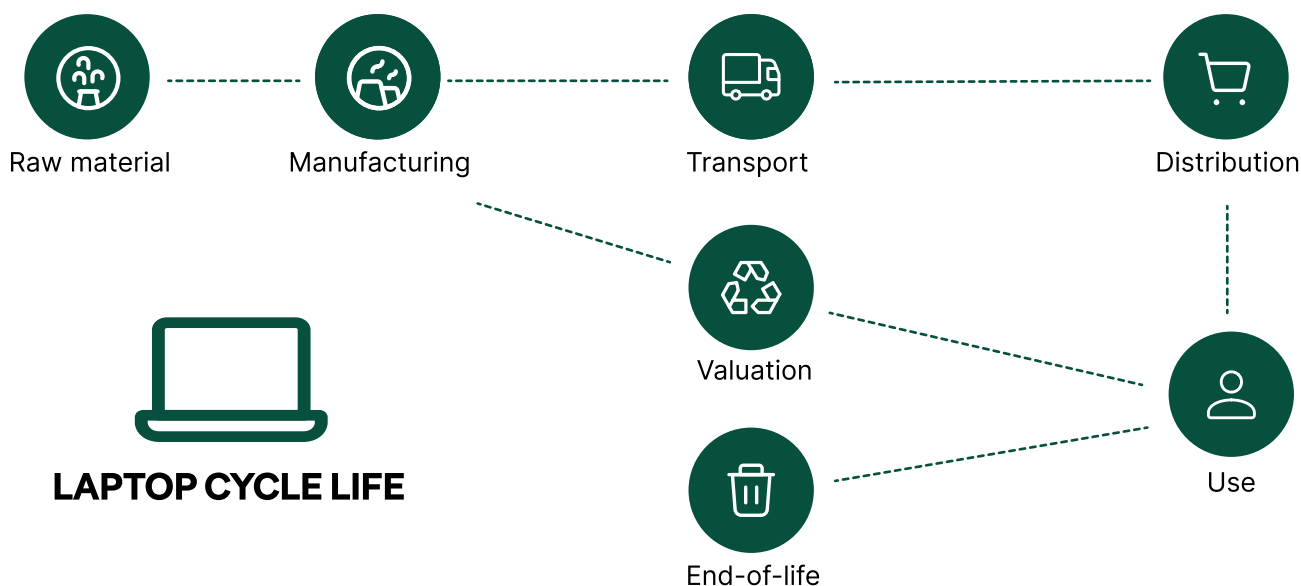
Networks have a huge impact. They represent 19% of IT carbon emissions.

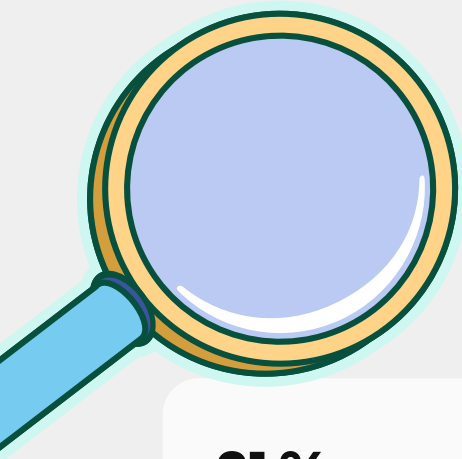
Mastering its uses



The manufacturing of a 2 kg computer = 800 kg of raw materials and mobilizes 124 kg of CO2 generated, out of the 169 kg emitted over the entire its life cycle

Buy responsibly




21 %

the percent of total office energy consumption that is due to computers (the figure is on the rise)

0.20 %

of available water

5.50 %

of the electricity produced in the world

53 million tons

The 2019 figure for global electronic waste

4.20 %

the percent of primary energy consumed by human activity (including a large part of hydrocarbons and coal)

600

The number of Watts consumed by each employee during 8 hours, the equivalent of 2 radiators

21 %

The increase in the amount of e-waste in 5 years

17.40 %

The percent of e-waste that gets recycled



Recycle your equipment

7

How Greenly helps your company store its daily data, and what you can do.



Monday

At my level

Make sure your smart-phone is on Wi-Fi rather than 4G.

Choose a thrifty browser. Chrome is one of the most greedy (27 Wh / 1 000 pages) with Internet Explorer and Firefox. Some of them donate part of their income to social or environmental projects: Ecosia, Ecogine, Eco-search, Lilo...

Choose to make a phone call instead of a long video call.

The mobile network consumes 5 to 25 times more energy than Wi-Fi.)

Communication level

Remove the automatic signature images of all employees.

Company level

Extend the life of the equipment.

The production of equipment accounts for 47% of the carbon emissions generated by digital technology.

Tuesday

At my level

Limit the sending of e-mails (with too many people in copy).

1 recipient =
6 g of CO2 saved.

Communication level

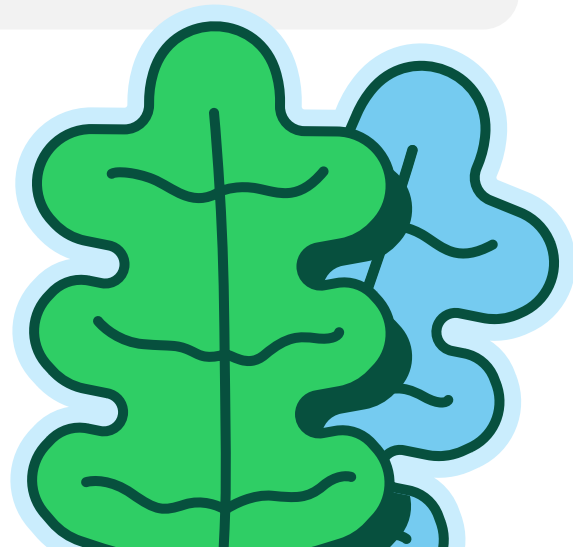
Post useful information only on the company's social networks, especially Gifs and videos.

Slightly reduce the quality of the videos.

Company level

Buy responsibly: choose energy-efficient and repairable devices.

Give preference to sustainability labels: European Ecolabel, EPEAT, Nordic Ecolabel, Blue Angel or TCO.



Wednesday

At my level

Work remotely! And turn off the geolocation of your mobile device. Type the address of sites you know in the internet browser, or click directly on favorites, rather than going through the search engine.

Going directly to a site can divide the greenhouse gas emissions by 4!

Optimize the size of your attachments when sending an email.

Communication level

To distribute newsletters, update the file, then delete the duplicates. Without optimizing data centers, the carbon impact will represent 2% of emissions in 2030.

Company level

Be vigilant about storage solutions. The PUE, for "Power Usage Effectiveness", is an indicator! Relocate your Cloud in France.



Thursday

At my level

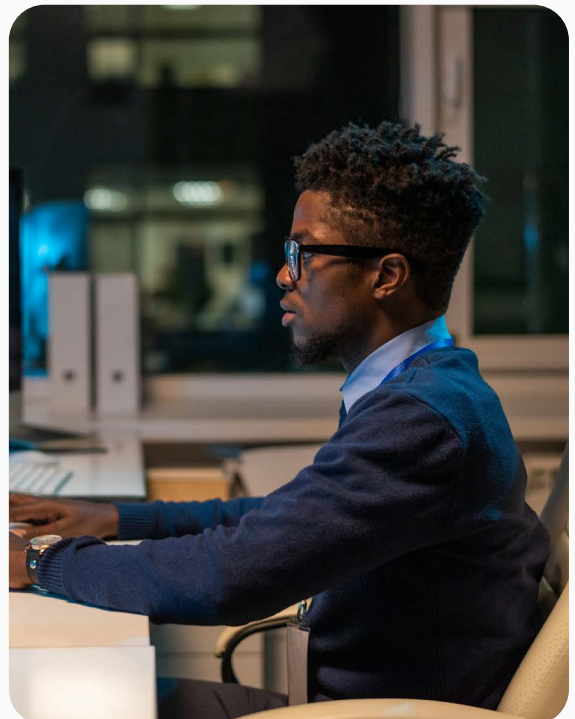
Replace your airplane trip with a video call. **On average, 1 minute of audio videoconferencing has a 61% lower impact than when the cameras activated.**

Communication level

For web ads, the carousel is web, we prefer the carousel to the video animation.

Company level

The annexed consumption of AWS provider's data centers is three times less than that of an on-premises data center.



Friday

At my level

Before leaving for the weekend, clean your computer!

Empty your mailbox and keep only what is necessary.

Delete spam.

Unsubscribe from newsletters that you don't read (solutions like Cleanfox can automate this task).

1 mail = 10 g CO₂

Only 10% of newsletters are opened.

Turn off your computer instead of putting it on standby.

Empty your computer's cache.

Communication level

10 h of an HD movie accounts for more than the combined data of all Wikipedia articles in English.

Company level

Set up a less impactful system in terms of video conferencing.

Google Meet, Tixeo and Teams are at the top of the list.

Recycle end-of-life equipment.

Weekends too!

At my level

Put your phone in energy-saving mode. This saves hours of battery life and extends the life of a smartphone.

On average, 35 applications are running at all times, whether we use them or not!

Sort your photos and videos to limit storage in the cloud.

Don't scroll endlessly on social media videos. Only watch the ones that really interest you!

Avoid over-equipping and replacing your devices too regularly.

Company level

Online videos account for 1/5th of the digital carbon emissions.

In 2018, this generated as much CO₂ as the entire country of Spain.



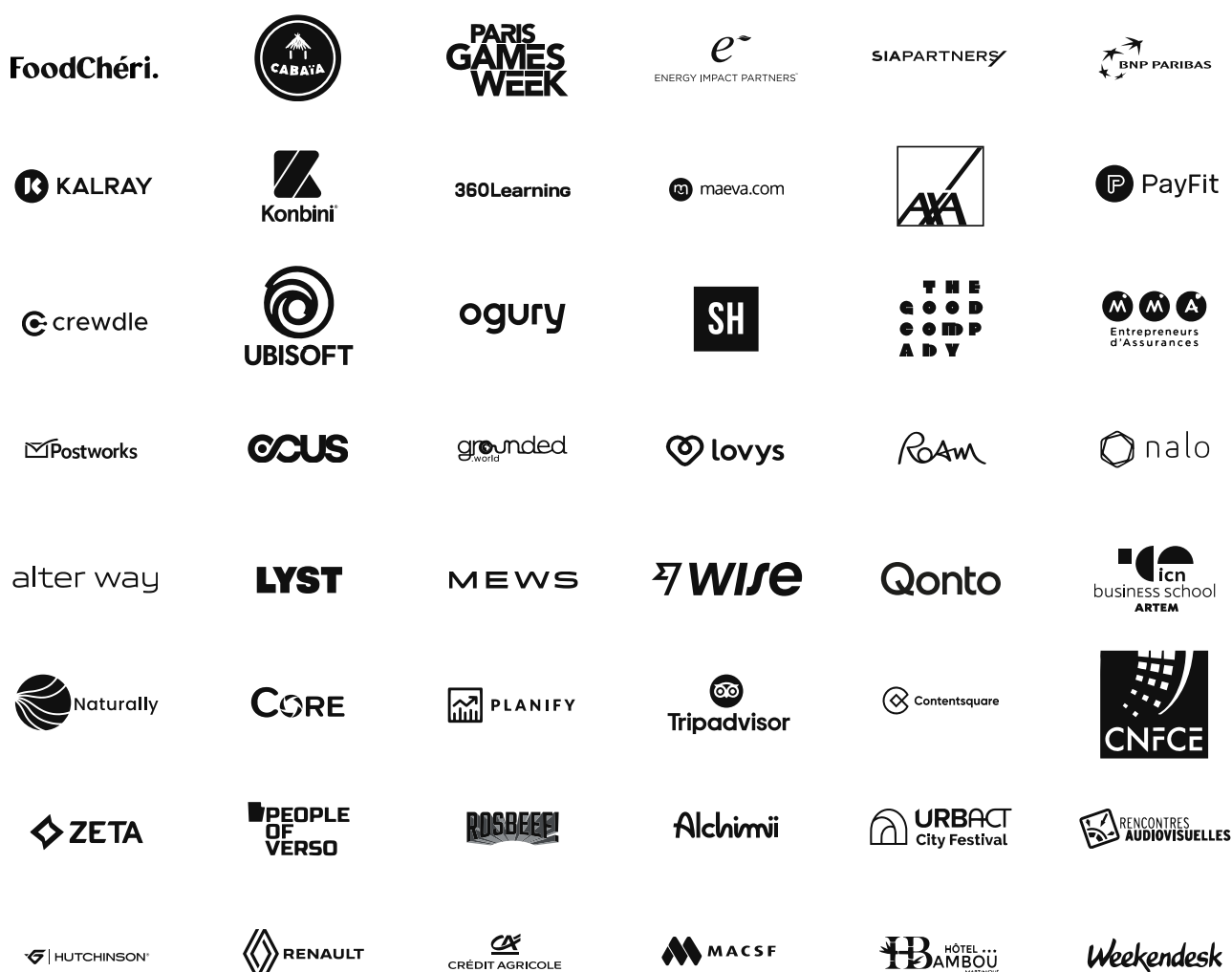


Greenly is a technology company on a mission to help build a carbon-neutral economy. Our software platform helps small and medium-sized businesses to introduce and automate carbon management. Until now, carbon management was time-consuming, complex, and static, but Greenly's gives a precise and affordable GHG assessment, on all scopes (1,2 and 3). In addition to this, our climate experts support our clients in the Net Zero strategy by offering personalized and concrete action plans, alternatives and projects to compensate for GHG emissions that cannot be reduced.

Today, Greenly provides its expertise via its Greenly Corporate Impact software platform to more than 1000 customers and receives the support of prestigious clients - large groups such as Axa, BNP Paribas, Faurecia and Médiamétrie, scale-ups such as Swile, Payfit and Alma, and small businesses that want to do their part for the planet and reduce their CO2 emissions.

It was originally a young start-up in Station F, and after raising significant funds, it continues to improve its software and related services by working closely with its customers, whether they are start-ups, VSEs, SMEs or large groups. At the end of 2021, a new stage was reached with the new optional offer for the realisation of a digital carbon assessment linked to the company "Greenly Web Services". Greenly's mission is clearly confirmed: enabling each company to manage its carbon footprint in order to better reduce its CO2 emissions thanks to a digitised solution at the most competitive price on the market. In one year, Greenly has implemented its technology for 3 million people by adding an impact measurement to banking services, has convinced tens of thousands of people to use its App, and supports more than 400 companies in measuring and reducing their CO2 emissions.

Just like **over 1000** other companies, they have entrusted Greenly with their Carbon Footprint



To find out more or to meet a Greenly expert

Website: <https://www.greenly.earth/>

Mobile App on all stores: <https://apps.apple.com/fr/app/greenly/id1490423197>

Contact: contact@greenly.earth



The logo for 'greenly' is centered on a dark green background. The word 'greenly' is written in a white, lowercase, sans-serif font. A small, solid green leaf icon is positioned above the letter 'e'. A diagonal line divides the background from the bottom-left to the top-right, separating the dark green upper section from a lighter green lower section.

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