

Computers and energy consumption

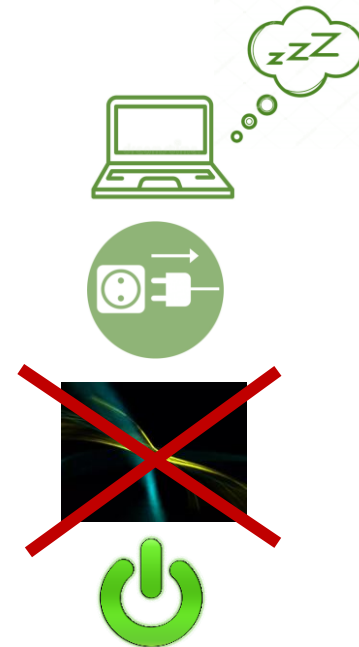
Did you know that..?



- ❖ If we change nothing, energy consumption linked to digital technology will represent **7% of green house effects** gas emission in 2040, I.E. 60% increase compared to 2020.
- ❖ **2/3 of consumption** takes place while equipment is on **sleeping mode**

Tips!

- ✓ Set the sleeping mode of the screen and the computer
- ✓ Switch off and unplug computers and screen during night and week-end, in the lab and the office
- ✓ Do not use moving screen saver
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Semaine du nettoyage numérique: 14-19mars

4% des émissions
mondiales GES



=



27 participants (12%)



189 481 fichiers supprimés
397Go éliminés



32 865 mails supprimés → 233kg CO₂e

12Go éliminés

1 253km



1207km



134 682km



domicile-travail :
2640km/j

94272km/an

740 612 participants au World Clean Up Day (France, Belgique, Suisse)



Efforts à maintenir dans la durée
Etendre à d'autres supports numériques

= sobriété numérique

La « Minute verte » MIVEGEC1point5:

Semaine du nettoyage numérique: 13-18mars

Jeudi 16 mars DRO + DDUNI

- ✓ Tutos + marathon
- ✓ 13h30 conférence
« Ecologie du numérique »
- ✓ 14h30-16h30 Atelier participatif N. Kozerawski
« Nettoyage de printemps »



DELETED

2022

en France :

1927 To

A Mivegec:

397Go et 32865 mails



Trier rapidement
Vider corbeille et messages envoyés
Se désabonner des newsletters
Bloquer indésirables



Trier/Organiser
Ordinateurs, Cloud, Drive

4% des émissions
mondiales GES



=



*Séminaire
MIVEGEC
09/03/23*

La « Minute verte » MIVEGEC1point5:

Digital clean up day: bilan



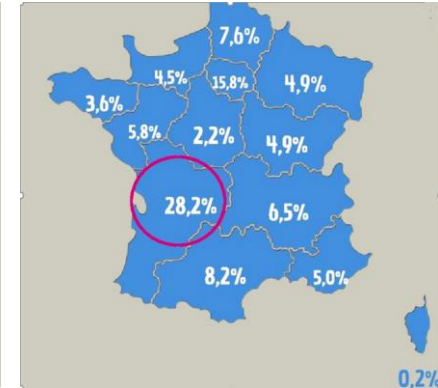
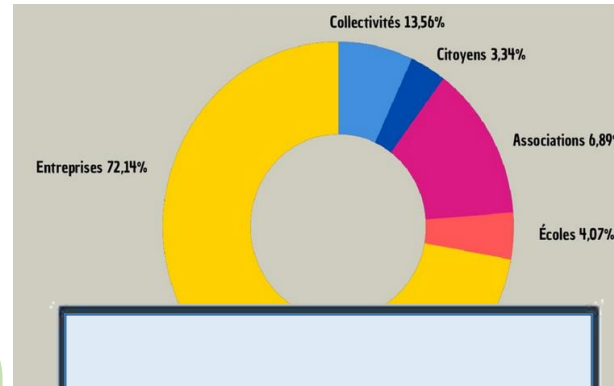
353 000 personnes

73% des bilans analysés

2022: 464 t CO2e

2023: 1 806 t CO2e

+289%



Equivalence:



52 000



8 299 000 km

**RDV le 16 mars
2024...**



Nouvelle Aquitaine
= Groupe La Poste
collecte téléphones



5 000 To supprimés
dont 600 To cloud



25 000 équipements réemployés

1676 t
CO2e



31 t DEEE:
22 t de matière recyclée
3.4 t valorisée NRJ

460 kg cuivre
5275kg plastique
16 931 kg
métaux ferreux



<https://myimpact.isit-europe.org/fr/>

Séminaire MIVEGEC 11/05/23

La « Minute verte » MIVEGEC1point5:
**Computers manufacturing
 and energy consumption**

How much is the carbon footprint of your computer ?



- ❖ Laptop computer
- ❖ Desk computer
- ❖ Screen
- ❖ (Smartphone?)



In kg eCO ₂	Classic	High-speed	Ultra-compact
Computers			
Laptop	200-300		
Desk computer	400	2500	500
Desk computer « all in one »	400	1000	

Screen	
24-27 inches	250-750
Curved 30 inches	1000

Remember that 25% to 50% of the carbon footprint is due to the energy of your screen

Smartphone : 100kg eCO₂



Computing collection

Mivegec cleaning day – collection of computer accessories



2 Screens



1 Mouse

1 Dock



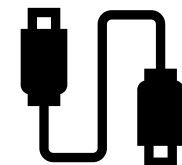
9 Keyboards

Pick-up / Drop-off

Room 122 - Cécile Cassan

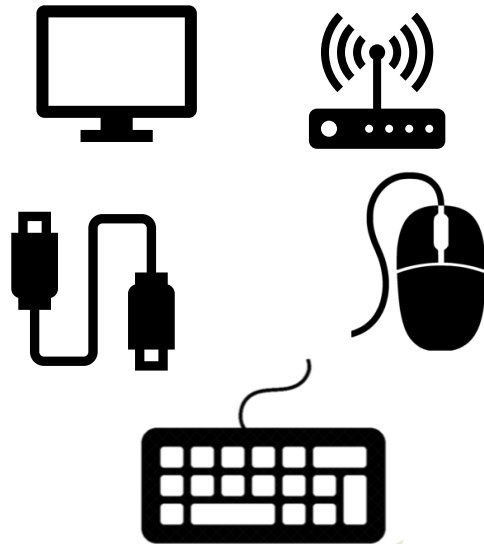
Room 134 - Bethsabée Scheid

Various Cables



- *Re-use*
- *Give to association*

What to do with old computers?



*Mivegec
Recyclerie*



Out of order?
Too old?

~~DELE~~
(*electric waste*)?

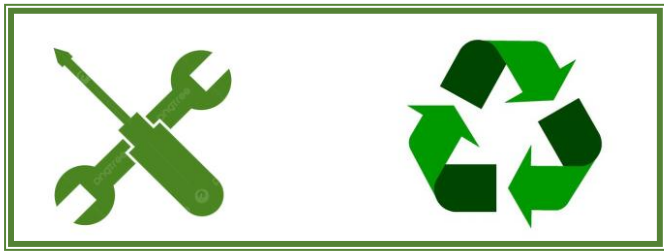
*Assistance
Informatique
IRD*



NOUAS



Pick-up / Drop-off
Room 122 - Cécile Cassan
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Computers and energy consumption

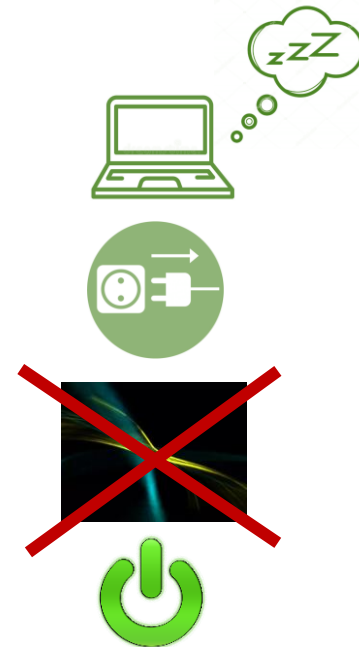
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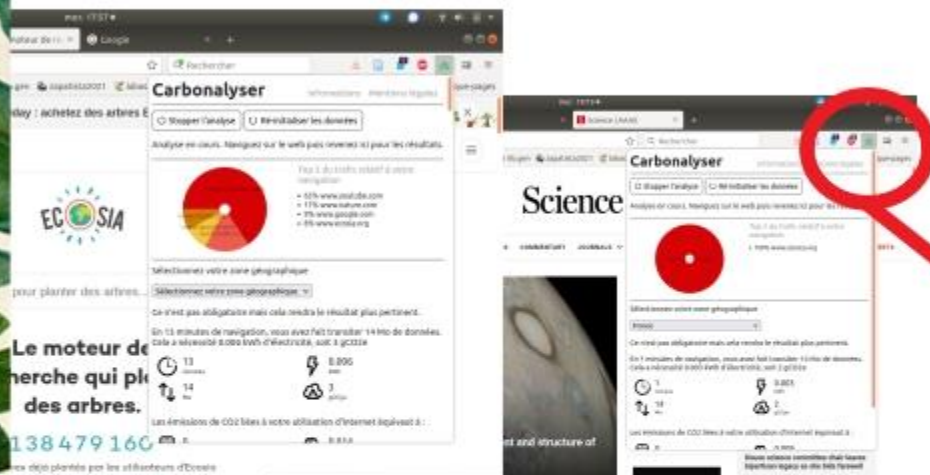
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La « Minute verte » MIVEGEC1point5:

Vers la sobriété numérique



Page d'accueil :

- 2 Mo pour Ecosia ou Google
- 6 Mo pour nature.com
- 7 Mo elab.mivegec.fr
- 11 Mo pour YouTube.com
- 14 Mo pour Science.org

Carbonalyser :

Une extension à installer sur votre logiciel de navigation afin de mesurer votre impact numérique journalier

6' Youtube / image fixe :

- 144p = 7 Mo

- 1080p = 32 Mo

5'30 Youtube / video :

- 144p = 9 Mo

- 480p = 41 Mo

- 1080p = 81 Mo

Qualité de l'image:

À régler dans les paramètres de Youtube

6' sur la radio FIP = 16 Mo

6' sur Deezer via le web = (19 Mo de chargement plateforme) + 14 Mo

Séminaire MIVEGEC 25 nov 2021

« La Minute Verte » MIVEGEC1point5

« Data storage – Data Centers »

Emissions de gaz à effet de serre



Source : greenit.fr



Servers

Digital: 4% GGE, 25% Data Centers. 200 Data Centers in France: 10% electricity

- Data Center: place where computers, servers, networks, storage equipment, software and cooling systems. Cloud computing refers to all the networks, servers and storage units to which users connect to Data Centers via a secure Internet connection.

Advantages / Disadvantages :

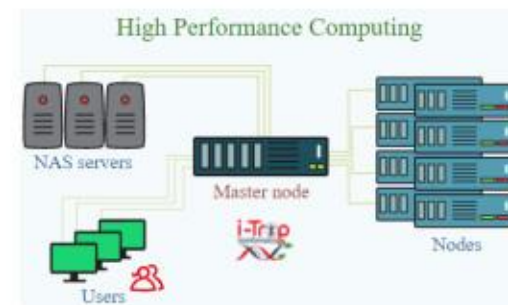
- Reduced operating cost, software, computing power, large volumes of data
- Energy overconsumption of storage infrastructure, risk of hacking

Simple tips:

Storing only necessary on Data Centers and storing locally after (computer, external hard drive). The IRD's i-Trop platform also limits data storage.

Green Data Centers : renewable energies and use the heat to heat other buildings.

↘ electricity consumption by 30 to 50%.



MIVEGEC seminar October, 21th