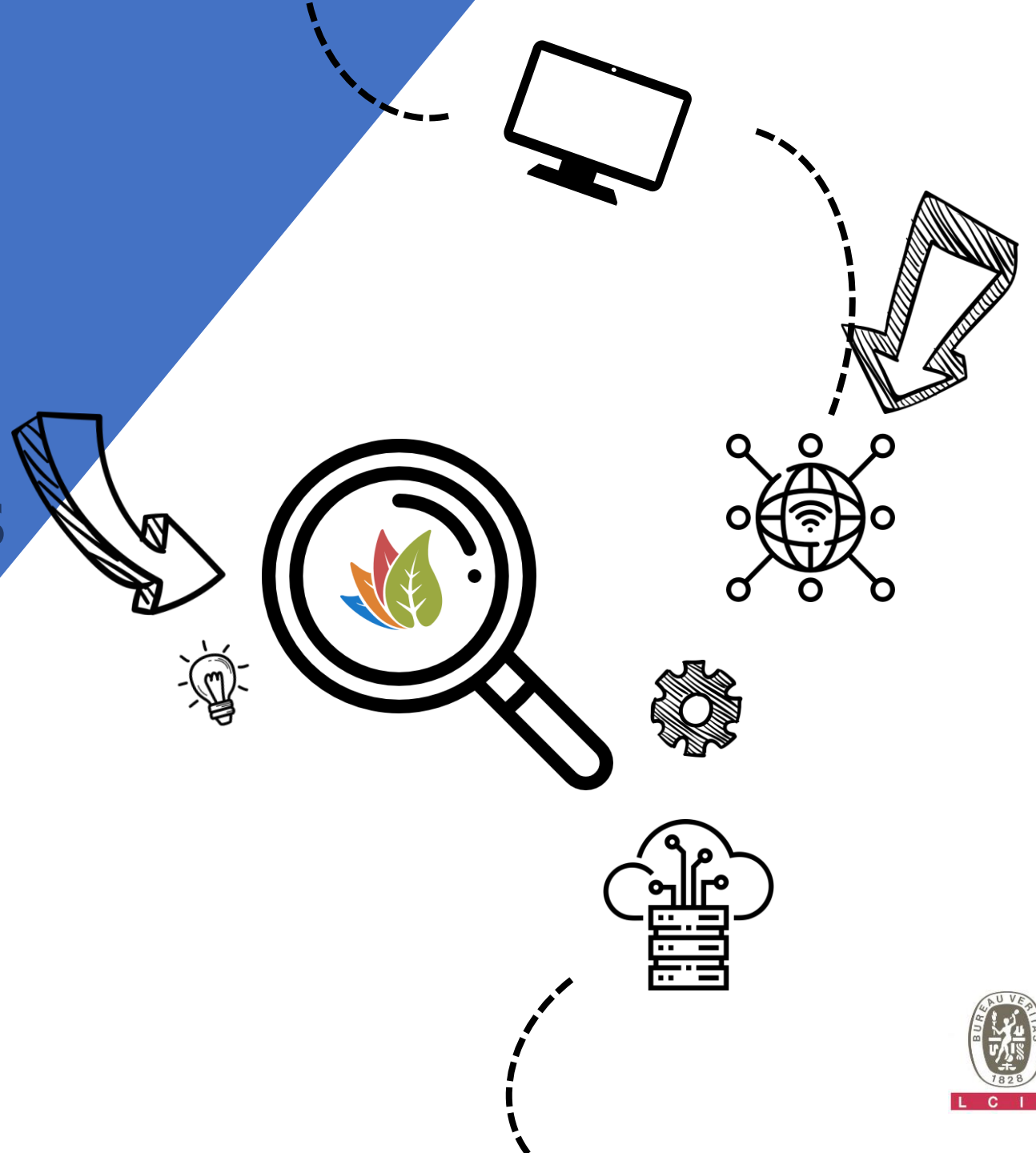


Carbone footprint of EIME software LCIE Bureau Veritas



NegaOctet EIME Consumer infographic

Version 1.0 - 2022



LCIE

NegaOctet pilot study, EIME

After 36 months of research, **NegaOctet** offers a method and tools to measure and reduce the environmental impact of digital services over their entire life cycle.

In 2021, the **EIME software** was selected from 12 pilot cases to implement the NegaOctet methodology.



METHODOLOGY

Realization of the
ADEME Digital
Services PCR

DATABASE

1,500 data

APPLICATION

12 validated pilot
studies

Pilote study realised by

Amandine VINCENOT, LCA Consultant

Firmin DOMON, LCA Consultant

Reference result

Usage scenario



1 laptop connected to 2 screens



2 days of modeling



Use in France



4.45 kg CO₂ eq.

Carbon footprint for using EIME v5 software for 2 days



What does this represent?

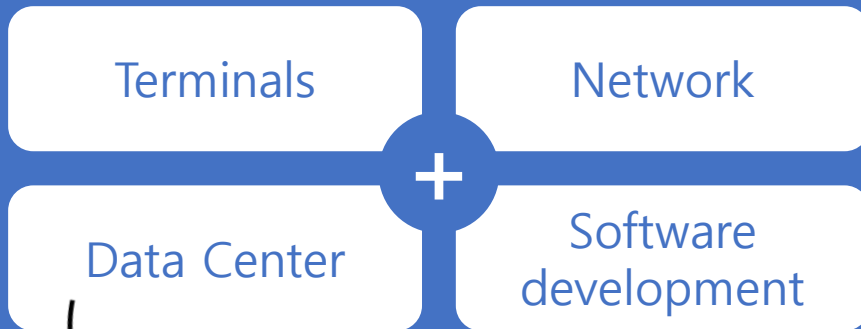


17.5 km by car

Source: datagir.ademe.fr

Scope of the study

The following elements are taken into account in the study



Data center architecture

- Servers
- Switch
- Firewall
- And the other equipment (cable, air conditioning, generator, etc.)

Terminals

We take into account the user's equipment to connect to EIME. The baseline scenario includes a laptop connected to 2 screens.

Data Center

Based on the NegaOctet data, the architecture of the data center dedicated to EIME has been reconstructed: servers, switch, firewall, as well as other non-IT equipment.

Network

Data exchanges between EIME datacenters and user terminals are considered. The impacts are representative of the cable network (ADSL and fiber).

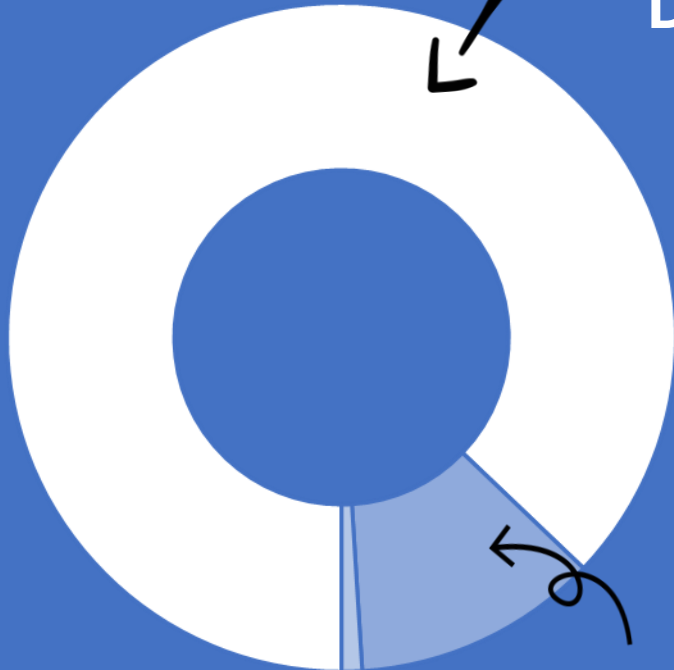
Software development

The computer equipment used for the development of the software is taken into account and amortized according to the useful life of the software (10 years).

Results analysis



Data Center



<1%

Software development, Network



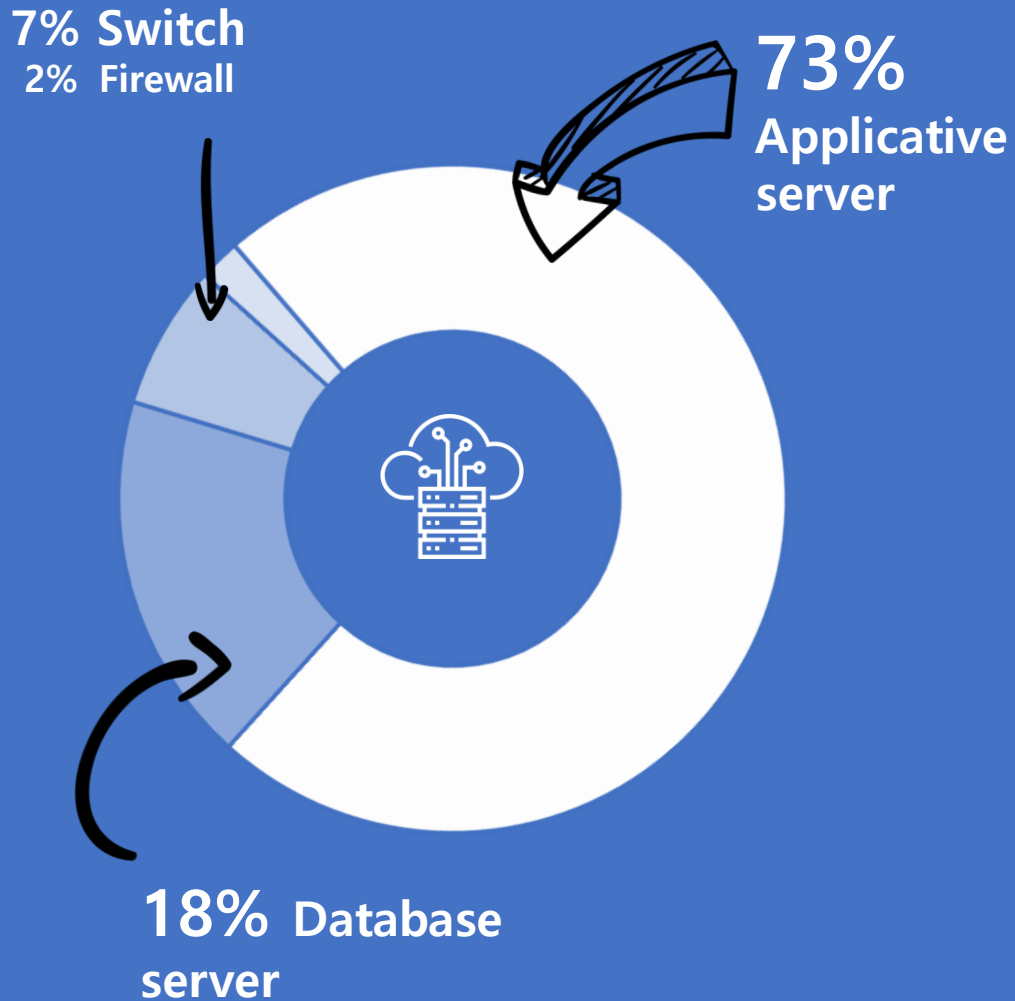
Terminals

88%. This is the contribution of **data centers** to the carbon footprint of EIME software. Which makes it the first source of impact.

User terminals represent 12% of impacts.

Network data transfer and software development have negligible impact.

Where do data center impacts come from?



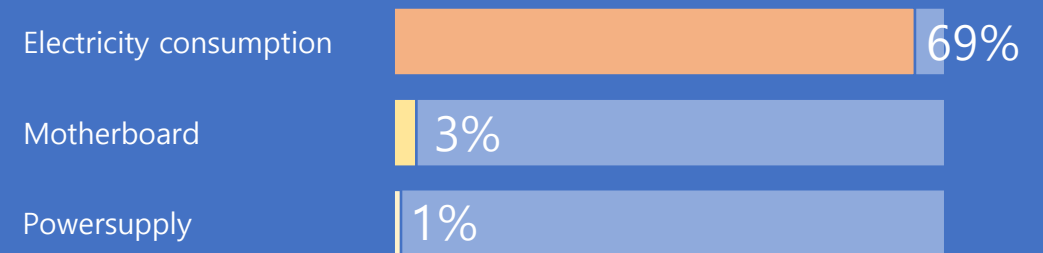
EIME has 2 types of servers:

Database server

This is the server used to store the databases. It is activated when a user of the software adds a module to his case study.

Applicative server

This is the server running the software. It performs the calculations necessary to obtain the impact results, manages the user interface and performs the exports. It represents 73% of data center impacts.



Individual actions to reduce the impact of the software

Act on the database server



Delete unnecessary EIME case studies



Limit the weight of EIME case studies by simplifying the nomenclature

For example, by grouping the materials between several parts



Individual actions to reduce the impact of the software

Act on the application server



Validating your case study before making exports avoids unnecessary actions



Prefer "Current tracking" export over "Multi tracking all indicators"

Individual actions to reduce the impact of the software

Act on user terminals



Increase equipment life



Switch off your equipment at night/on weekends



Prefer the cable network (ADSL, Fiber) to the mobile network (4G, 5G)

Contact

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NegaOctet EIME Consumer infographic

