

### From carbon footprint to transition plan in a French geosciences laboratory

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### ▶ To cite this version:

Emilie Jardé, Laure Guérit, Val Kaupp, Annick Battais, Pierre Dietrich, et al.. From carbon footprint to transition plan in a French geosciences laboratory. European General Assembly 2024 (EGU24), Apr 2024, Vienne (AUT), Austria. pp.EGU24-8098, 2024, 10.5194/egusphere-egu24-8098. hal-04505215

### HAL Id: hal-04505215 https://hal.science/hal-04505215v1

Submitted on 31 Oct 2024  $\,$ 

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# From carbon footprint to transition plan in a French geosciences laboratory

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**Context.** Géosciences Rennes is a laboratory of about 150 people conducting research in the fields of tectonics, sedimentology, hydrology and environmental sciences. From 2021, the Sustainable Development & Social Responsibility working group has determined the C footprint by using GES1.5 (Research Consortium labo1.5). This tool makes it possible to identify the main emission items to design and quantify specific actions to propose a transition plan to reduce the C footprint up to 2030.



**Typology of purchases: high increase in 2023 (compared to 2019)** 



Take-home messages. Our experience shows that ownerships of the issues takes time, which we no longer have. It emphasizes the need to go further than awareness measures. Achieving the European Union targets will probably require transforming the way we do research to adapt to environmental constraints our societies are facing. In 2024, work is on going on downscaling the C footprint from the laboratory level to more precise thematic profiles level in order to design adapted reduction strategy.

## 861 ± 217 T eCO2 / year

5.8 ± 1.2 T eCO2 / pers / year

**2019-2023 C footprint**: purchases (56 ± 8 %) > buildings  $(14 \pm 6\%) > \text{commuting} (8 \pm 3\%).$ 

### **Covid pandemy**: -41% compared to 2019 -81% for travels and -54% for put

2023 far away from the objective +19% compared to 2019 -28% for travels, but +83% for pu

44% of the purchases of the lab passing through the bodies (Univ Rennes and CNRS) and 56% of the pu through our OSUR observatory (mainly lab equipm platforms).

> Need to pay close attention to the lab's scope in account all the lab's purchases.

Main item: Lab equipment 61%, Consumables for (chemicals) 12 %

Efficient mitigation strategies must deal with labo equipement to induce a significant decrease in th

> Share lab equipment

> Increase in their lifetime along with an increase maintenance

	2021 March	Creation
	July	First C too
$(22 \pm 60/) > \pm co/c$	Oct.	Participator commit to a figures? wit
$(22 \pm 0\%) > travers$	2022 🤝	-
	April	Seminar: digital teo
rchases	May-Jun.	Drawing
	July	Vote and
urchases	Nov.	Seminar : its footprin
	Nov.	Participato to reduce t
	2023	-
the 2 supervisory archases passing	JanFeb.	Summary sals for ac
nents and analytical	March	Survey or
n order to take into	May-Sept.	Drawing u
	Oct.	Vote and a plan (26 p
r laboratory	2024	89% of the
	Jan.	First year o
oratory ne total C footprint	On going	Definition of matic profi
of repairs and		
	Visit	t the website









of the SD Group

otprint (2019)

ry workshop: should the lab a reduction approach? with th what tools?

the environmental impact of chnology

up a lab Environmental Chart

I adoption of the Chart

A lab's commitment to reducing

bry workshop: proposals for actions the lab's environmental footprint

of the workshop and other propoction

n acceptability of 45 proposals

up a Transition Plan for the lab

adoption of the transition proposals adopted)

staff vote for the transition plan

of application of the transi-

of C footprints based on thelles

# of the SD&SR group of the lab

