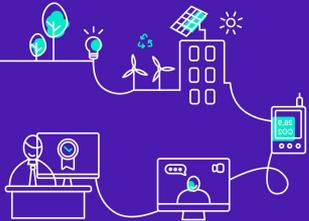




Brussels Beer Project

Carbon Footprint Report

2021

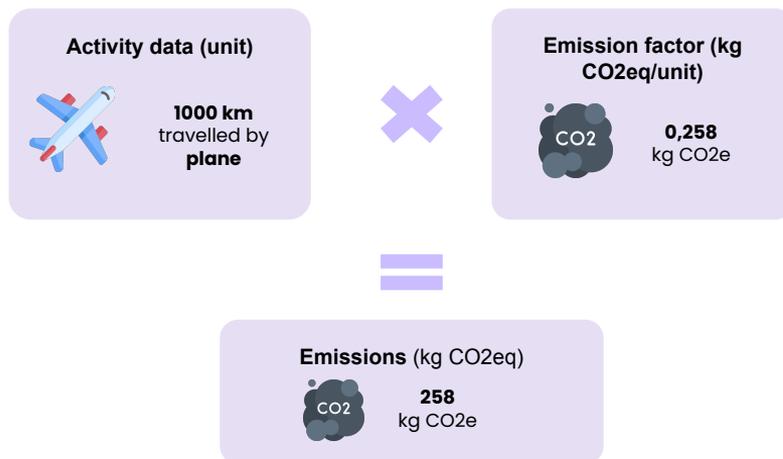


INTRODUCTION

Bilan Carbone® is a greenhouse gas accounting method that provides a framework for entities (companies, governments) to measure and report their greenhouse gas emissions.

The method commands to measure **all the emissions physically necessary for a company's activity** including its upstream (procurement, freight, etc.), production and downstream activities (distribution, use of products sold, etc.).

Emissions are calculated by multiplying an **activity data** (physical or financial) by an **Emission Factor** (EF) from a reference database:



Scopes: definition

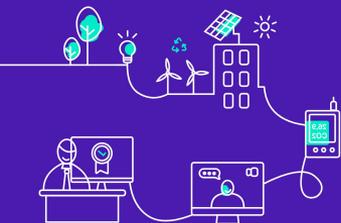
The Scopes designate the perimeter of the GHG emissions. They are divided into 3 categories:

Scope 1: direct GHG emissions, mainly due to the combustion of fossil fuels for heating or company vehicles.

Scope 2: indirect emissions associated with the production of electricity and heat.

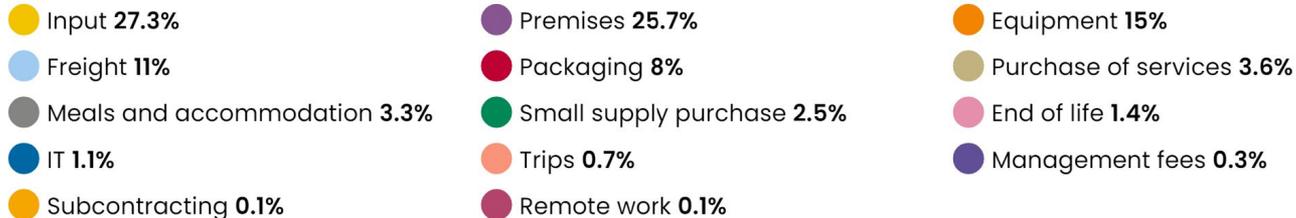
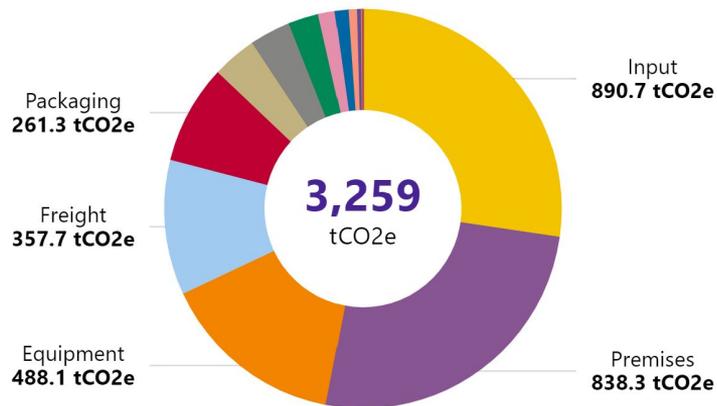
Scope 3: all other indirect emissions in your value chain (travel, purchasing, waste, etc.). It generally concentrates most of the emissions.

The Scopes are then broken down into 23 emissions categories.



SUMMARY

Total footprint 2021 for Brussels Beer Project (tCO2e)



What is the perimeter?

- > Reference year: 2021
- > Scopes: 1, 2 and 3
- > Exclusion: none

Which sources have been used?

> Data input on the Sami platform and excel files uploaded (trips, general ledger, etc)

The employee surveys have an answering rate of 70%

Equivalent to...



59,200 m²

of French mature forest



905

round trips Paris / New York by plane



429

world tours with diesel car



360 persons

their emissions on a year

SUMMARY



Employee carbon intensity?

Employee carbon intensity (ECI) is calculated per the following:

Headquarter footprint / number of employees

Where HQ footprint is a part of the total carbon footprint, common to all companies whatever the industry. The emission categories considered to compute the HQ footprint are: commuting and business travels, meals, offices, office IT hardware, and remote work.



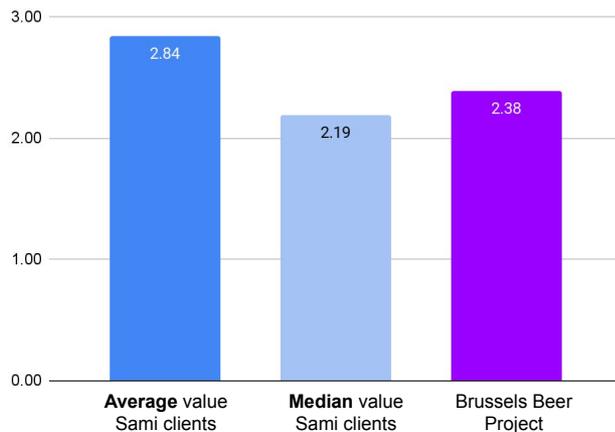
Employee carbon intensity?

We report your GHG emissions to your turnover to compare you to your sector.

The comparison data is taken from Sami's customer database and the CDP database for the specified sector. This intensity is calculated on all items.

CARBON FOOTPRINT 2021 : BENCHMARK

Employee carbon intensity (tCO₂e/employee)



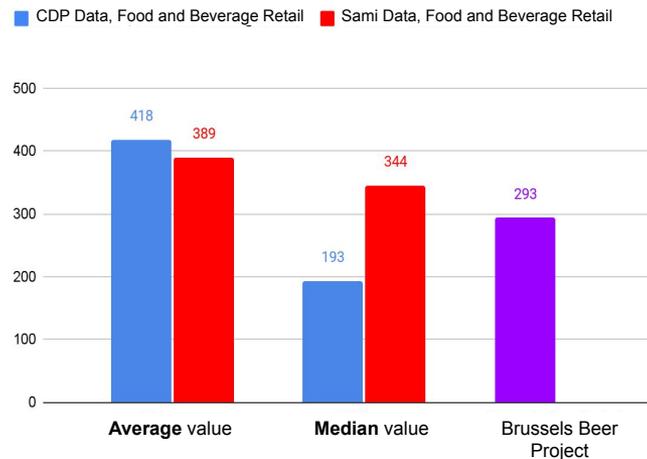
BRUSSELS BEER PROJECT'S EMPLOYEE CARBON INTENSITY IS...



2,38

tCO₂e / employee

Economic carbon intensity (kgCO₂e/k€ sales)



BRUSSELS BEER PROJECT'S ECONOMIC CARBON INTENSITY IS...



293

kg de CO₂e / k€ de CA

CO₂

2 392 tCO₂e

- Premises
- Agricultural inputs
- Freight
- Packaging inputs
- Packaging end of life

BEER PRODUCTION

RESULTS

Agricultural inputs

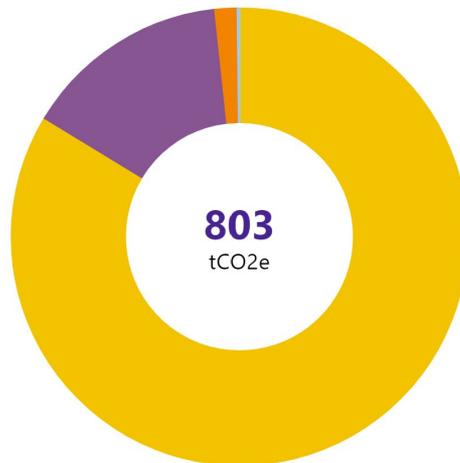
 **803 t CO2e**

 **27% of your footprint**
(1st emission source)

How was this result calculated?

This section is analyzed using the input data you provided.

Total emissions (tCO2e)



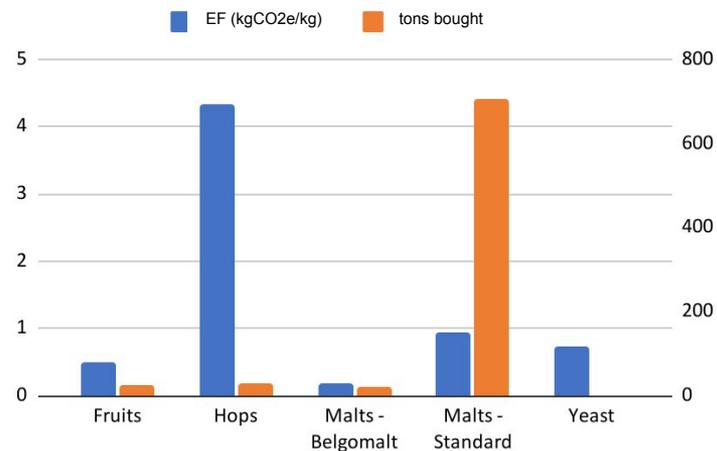
 Malts **83,2%**

 Hops **14,8%**

 Fruits **1,8%**

 Yeast **0,2%**

Agricultural inputs emission factors (kgCO2e/kg) and quantity bought (tons)



RESULTS

Premises



838 t CO₂e



25% of your footprint
(2nd emission source)



The equivalent of 123 years
of heating by Gas in a
French household



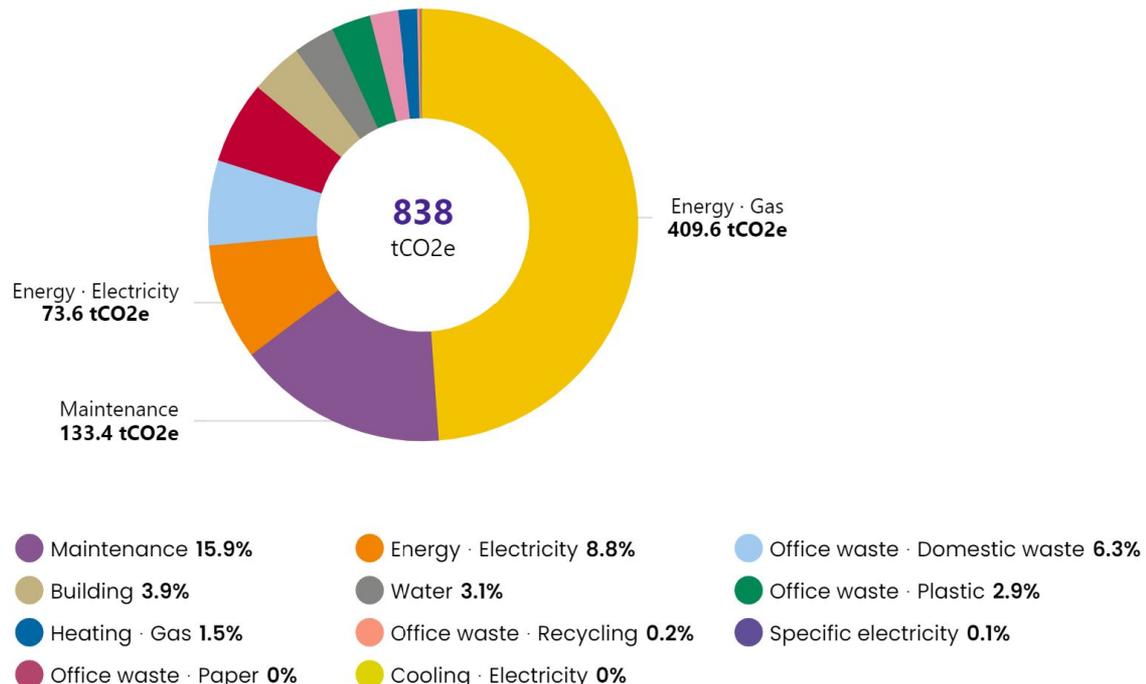
How was this result calculated?

Premises data was collected through data input on the platform and the following documents: electricity bills, maintenance expenses, energy performance diagnosis, equipment inventories.

Air conditioning emissions correspond to the leakage of refrigerants, which are powerful greenhouse gases.

In cases where the information is difficult to access, we use standard data based on the [BO study 2021](#), which proposes a standard footprint per square meter for an office building over its entire life cycle, or on studies by Zero Waste France for average waste figures per office worker.

Total emissions (tCO₂e)



RESULTS

Premises

 **838 t CO2e**

 **25% of your footprint**
(2nd emission source)

 The equivalent of 123 years
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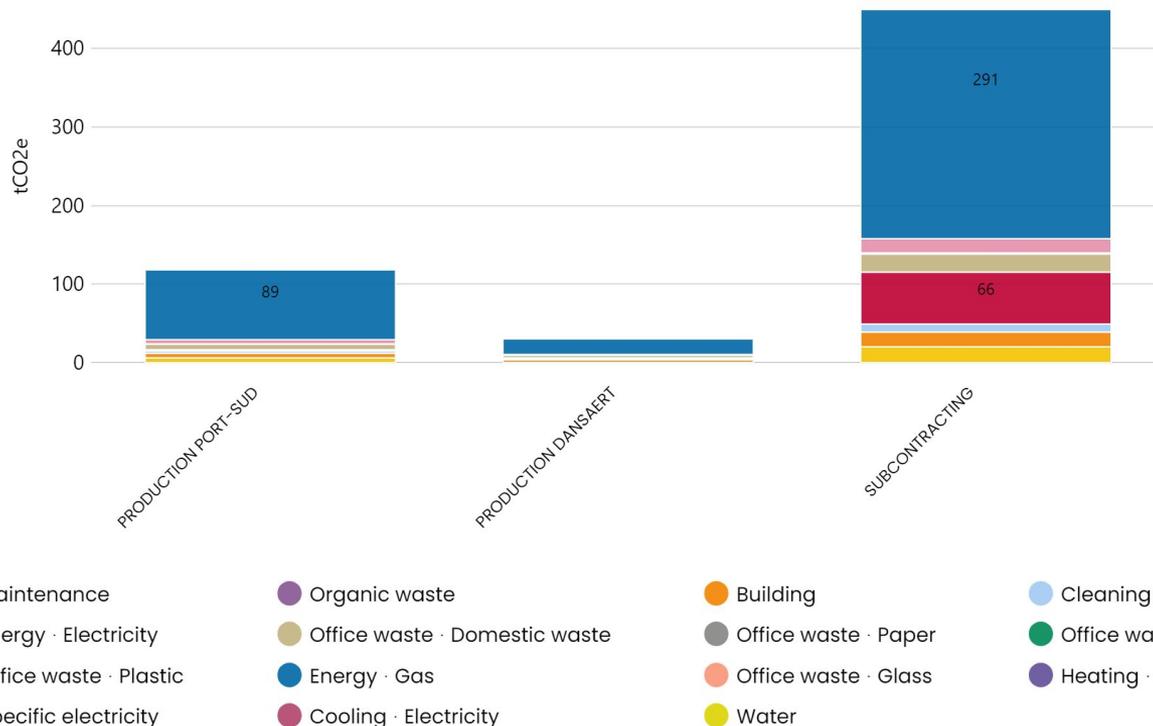
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Air conditioning emissions correspond to the leakage of refrigerants, which are powerful greenhouse gases.

In cases where the information is difficult to access, we use standard data based on the [BC study 2021](#), which proposes a standard footprint per square meter for an office building over its entire life cycle, or on studies by Zero Waste France for average waste figures per office worker.

Total emissions : production sites



To reduce the impact of your premises, you can among other things: reduce the environmental impact of heating, reduce your electricity consumption, improve the efficiency of your cooling system, reduce and sort your waste...

RESULTS

Premises

 **838 t CO2e**

 **25% of your footprint**
(2nd emission source)

 **The equivalent of 123 years**
of heating by Gas in a
French household

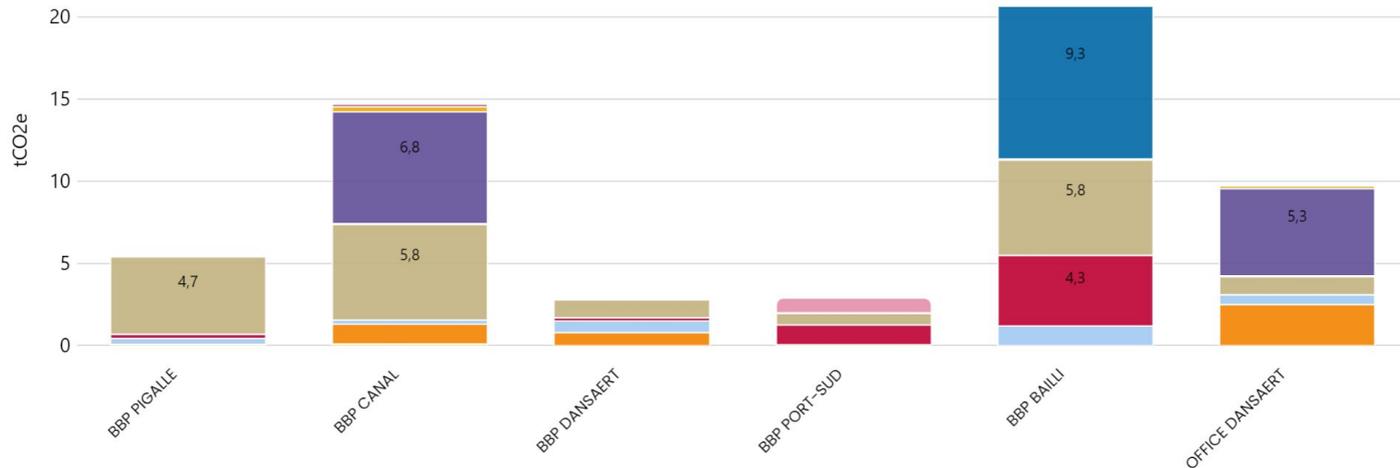
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Air conditioning emissions correspond to the leakage of refrigerants, which are powerful greenhouse gases.

In cases where the information is difficult to access, we use standard data based on the [BC study 2021](#), which proposes a standard footprint per square meter for an office building over its entire life cycle, or on studies by Zero Waste France for average waste figures per office worker.

Total emissions : taprooms and office



- Maintenance
- Energy · Electricity
- Office waste · Plastic
- Specific electricity
- Organic waste
- Office waste · Domestic waste
- Energy · Gas
- Cooling · Electricity
- Building
- Office waste · Paper
- Office waste · Glass
- Water
- Cleaning
- Office waste · Recycling
- Heating · Gas

To reduce the impact of your premises, you can among other things: reduce the environmental impact of heating, reduce your electricity consumption, improve the efficiency of your cooling system, reduce and sort your waste...

RESULTS

Freight



358 t CO₂e



11% of your footprint
(4th emission source)

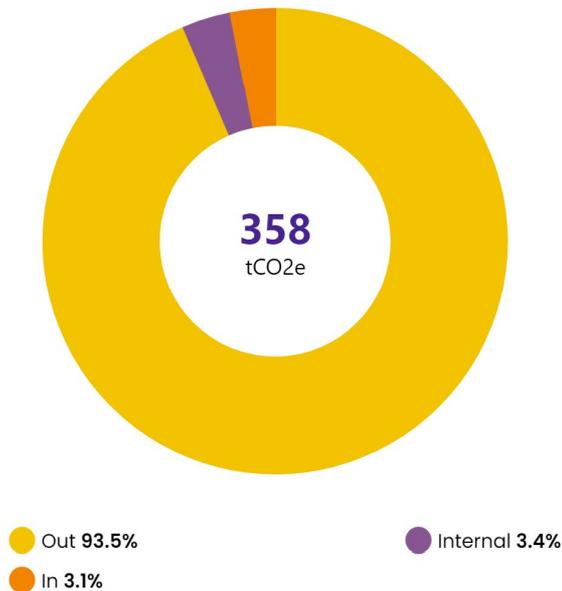


How was this result calculated?

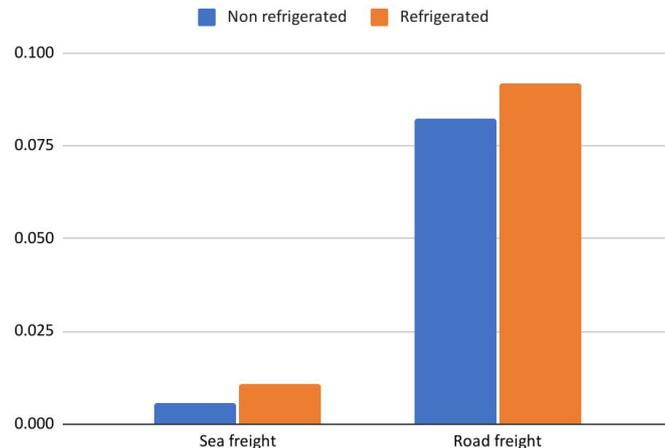
This section is analyzed using **the incoming, internal and outgoing freight data** that you provided.

The outgoing freight is taken from the emission data given by your carrier Van Mieghem for European shipments (road freight) and by an estimate of the volume sent to Japan (sea freight).

Total emissions (tCO₂e)



Freight emission factors (kgCO₂e/ton.km)



RESULTS

Packaging and packaging equipment

 **287 t CO2e**

 **9% of your footprint**
(5th emission source)

How was this result calculated?

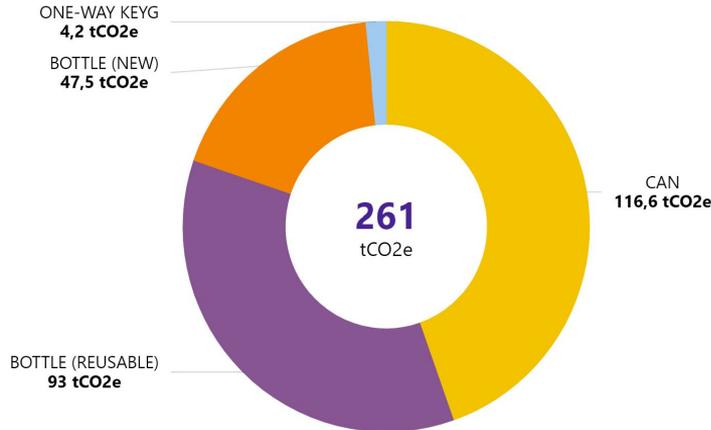
This section is analyzed using **the packaging data** that you provided (quantity, weight, materials).

Inox keg have been estimated with a lifetime of 10 years and 6 years for plastic crates.

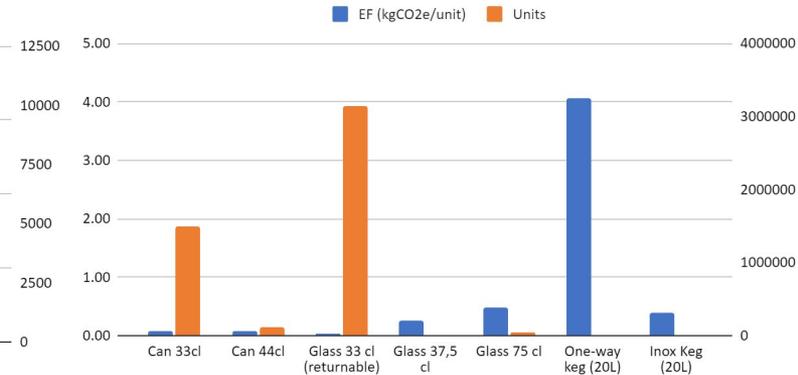
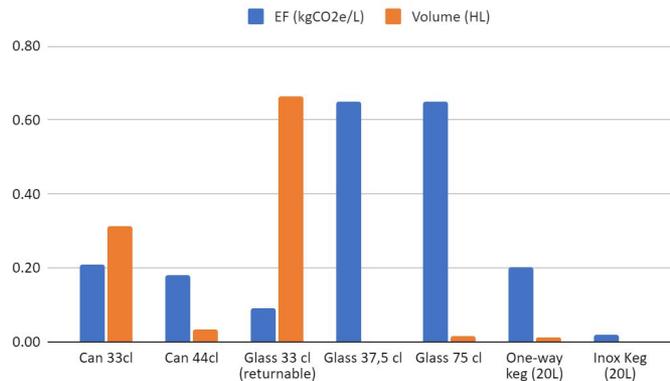
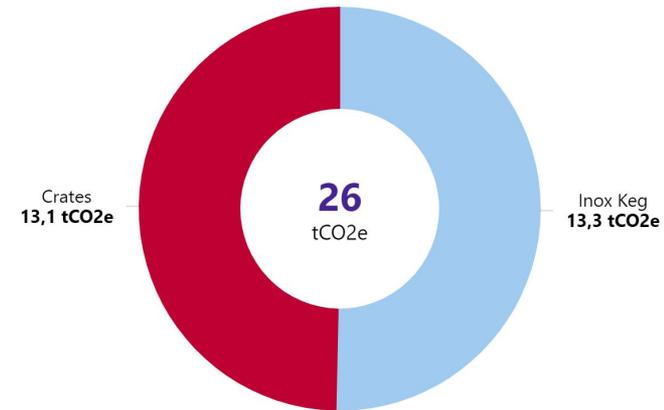
Reusable bottles have an impact 85% lower than new bottle, this value has been applied according to [this study](#).



Total emissions primary packagings



Total emissions packaging equipment



RESULTS

Packaging end of life

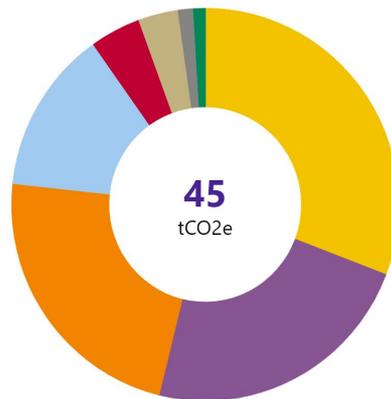
 **45 t CO2e**

 **2% of your footprint**
(9th emission source)

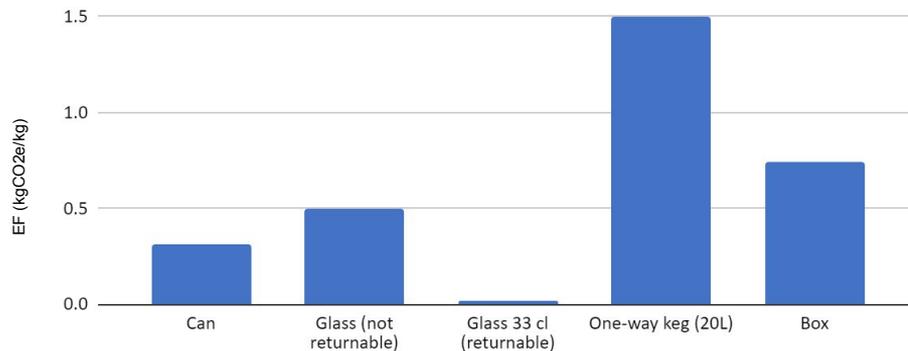
How was this result calculated?

This section is analyzed using **the packaging data** that you provided (quantity, weight, materials).

Total emissions (tCO2e)



-  Glass 33 cl (returnable) **30,8%**
-  Glass 75 cl **23%**
-  Box **22,9%**
-  Can 33cl **13,5%**
-  One-way keg (20L) **4,2%**
-  Glass 37,5 cl **3,3%**
-  Can 44cl **1,3%**
-  Crown caps **0,9%**



SUMMARY

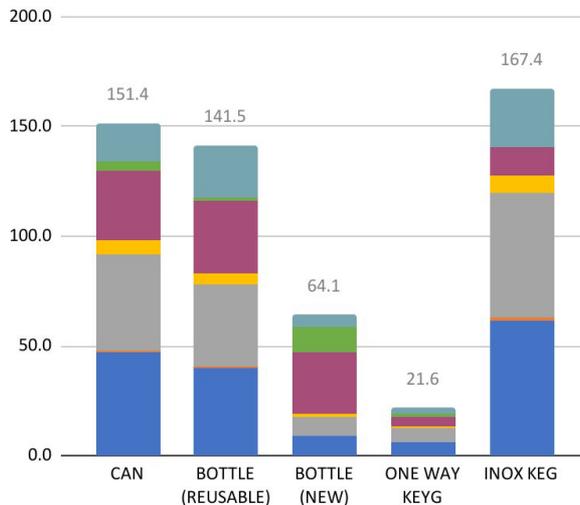
Global emissions linked to beer production

How was this result calculated?

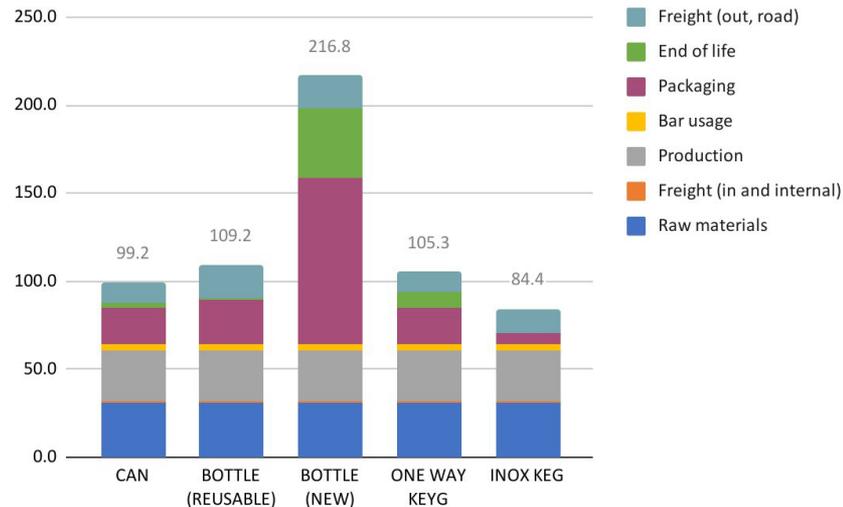
Data used are related to packaged beer in Danseart and Port-Sud only (subcontracting is excluded from this synthesis).

Emissions related to upstream production (upstream freight, raw materials) have been reduced to the quantity of beer packaged.

Total emissions (tCO₂e)



Relative emissions (kgCO₂e/HL)



- Freight (out, road)
- End of life
- Packaging
- Bar usage
- Production
- Freight (in and internal)
- Raw materials

| | Format distribution |
|-------------------|---------------------|
| Can | 29% |
| Bottle (reusable) | 24% |
| Bottle (new) | 6% |
| One-way keg | 4% |
| Inox keg | 37% |

The Ademe database on the food industry (Agribalyse) gives an emission factor of [112 kgCO₂e/HL](#) for a "core market" beer.

CO₂

641 tCO₂e

BRUSSELS BEER PROJECT

- Equipment
- Procurement of services
- IT

PROCUREMENT

RESULTS

Equipment

 **488 t CO2e**

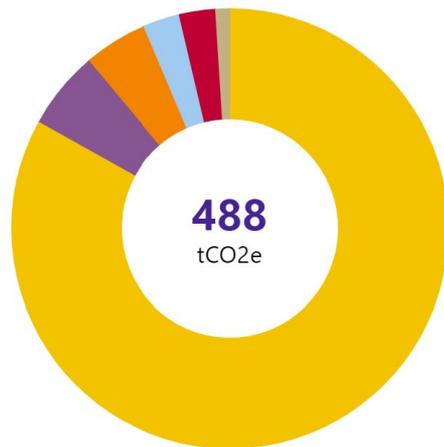
 **15% of your footprint**
(3rd emission source)

How was this result calculated?

This category is analyzed through the accounting data that you have provided and which have been analysed by our software and re-categorized when needed by our carbon expert

The ADEME database (France) references monetary ratios giving emission factors per € spent for each type of purchase. We also associate supplier-specific emission factors when available, from our own database or from CDP and ADEME databases

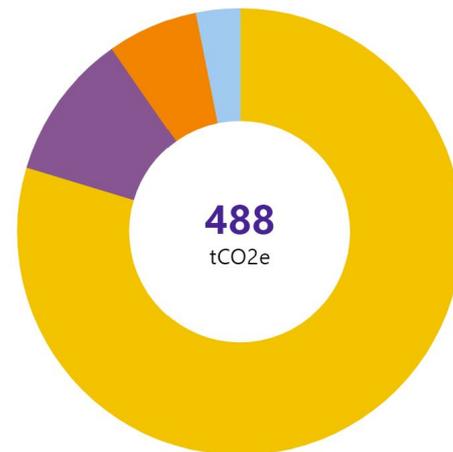
Total emissions per category



-  Machinery and equipment **83.1%**
-  Furniture **5.8%**
-  Maintenance **4.7%**
-  Inox Keg **2.7%**
-  Crates **2.7%**
-  Appliance **1%**

| SAMI CATEGORY | ACTIVITY DATA |
|-------------------------|---------------|
| Machinery and equipment | 631 k€ |
| Furniture | 58 k€ |
| Maintenance | 114 k€ |
| Inox Keg | 60000 kg |
| Crates | 24000 kg |
| Appliance | 7 k€ |

Total emissions per legal entity



-  Beer Project **79.7%**
-  Pigalle **10.6%**
-  Canal **6.6%**
-  Bailli **3.1%**

| SAMI CATEGORY | ACTIVITY DATA |
|---------------|---------------|
| Beer Project | 603 k€ |
| Pigalle | 84000 kg |
| Canal | 123 k€ |
| Bailli | 63 k€ |
| Bailli | 22 k€ |

RESULTS

Procurement of services

 **118 t CO2e**

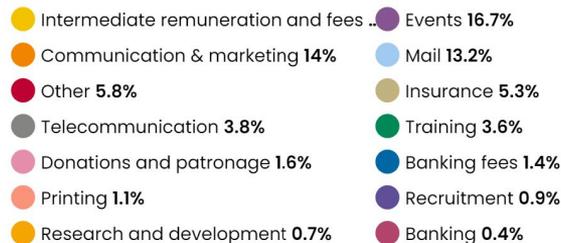
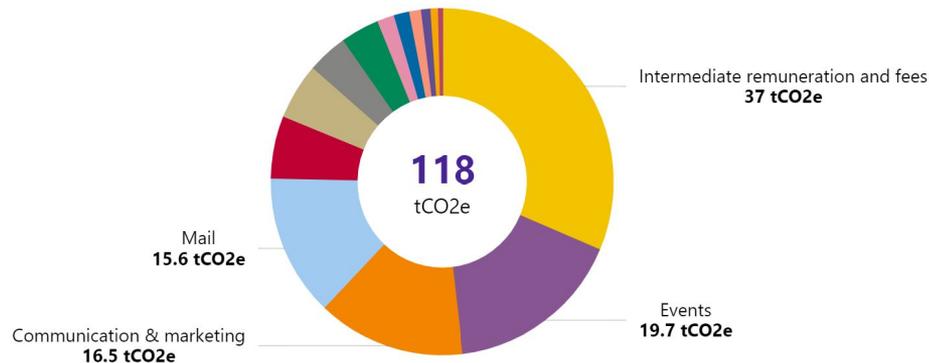
 **4% of your footprint**
(6th emission source)

How was this result calculated?

This category is analyzed through the accounting data that you have provided and which have been analysed by our software and re-categorized when needed by our carbon expert

The ADEME database (France) references monetary ratios giving emission factors per € spent for each type of purchase. We also associate supplier-specific emission factors when available, from our own database or from CDP and ADEME databases

Total emissions (tCO2e)



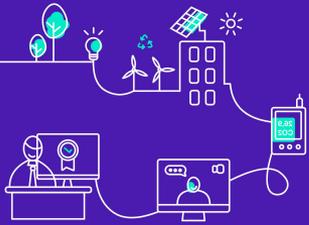
| SAMI CATEGORY | ACTIVITY DATA |
|------------------------------------|---------------|
| Intermediate remuneration and fees | 331 k€ |
| Events | 116 k€ |
| Communication & marketing | 97 k€ |
| Mail | 93 k€ |
| Other | 41 k€ |
| Insurance | 56 k€ |
| Telecommunication | 26 k€ |
| Training | 25 k€ |
| Donations and patronage | 11 k€ |
| Banking fees | 15 k€ |
| Printing | 7.7 k€ |
| Recruitment | 6.1 k€ |
| Research and development | 4.9 k€ |

How to read: 331k€ were spent for intermediate remuneration and fees in 2021. According to the ADEME database, €1000 spent corresponds to the emission of 110 kg CO2e.

To reduce the carbon footprint of procurement of services, you can help your suppliers reduce their own carbon footprint through our latest feature: Supplier survey. You can also implement a responsible procurement policy with a charter.

Focus: how does measuring carbon with financial data work?

Let's take an example. We have 3 companies: A, B and C, which are suppliers of consulting services which are categorized as "intellectual services".



A

Does not communicate its carbon footprint or **has never done so**: an industry average emission factor has to be used. One common "intellectual services" average emission factor is **170 kg CO₂e / k€ spent**.



B

Has recently computed its carbon footprint and therefore is able to showcase a supplier-specific emission factor: **150 kg CO₂e / k€ spent**.



C

Has been computing its carbon footprint for 5 years and has already taken action to reduce its greenhouse gas emissions. Its supplier-specific emission factor is **90 kg CO₂e / k€ spent**.

According to carbon accounting methodologies, each time you **spend money to purchase a service or a product**, you are attached a **share of the emissions** that your supplier has emitted to create this service or product

Back to our example > **if you spend €10k**:

→ from Company A, your carbon footprint is **1,7 t CO₂e** ;

→ from Company B, it's **1,5 t CO₂e** ;

→ from Company C, it's **900 kg CO₂e**.

It is therefore in your interest to **purchase the service from company C**: your own carbon footprint will be much lower.

RESULTS

IT

 **35 t CO2e**

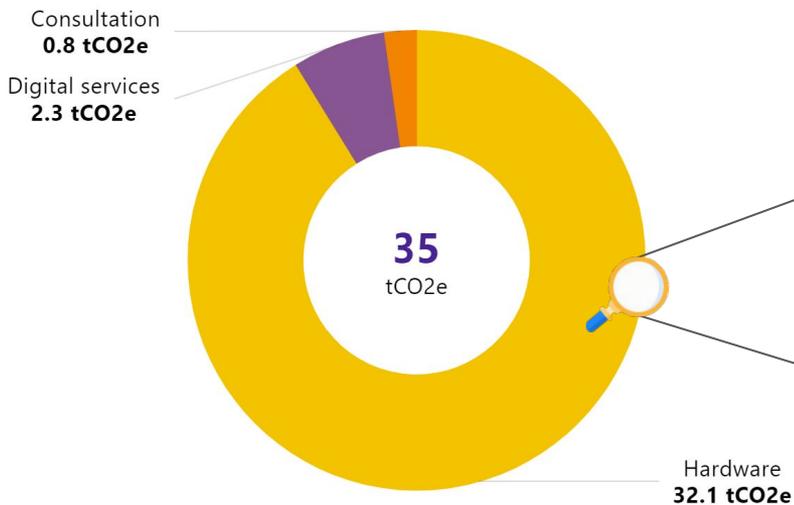
 **1% of your footprint**
(10th emission source)

How was this result calculated?

IT data is collected through data input on the platform and accounting documents.

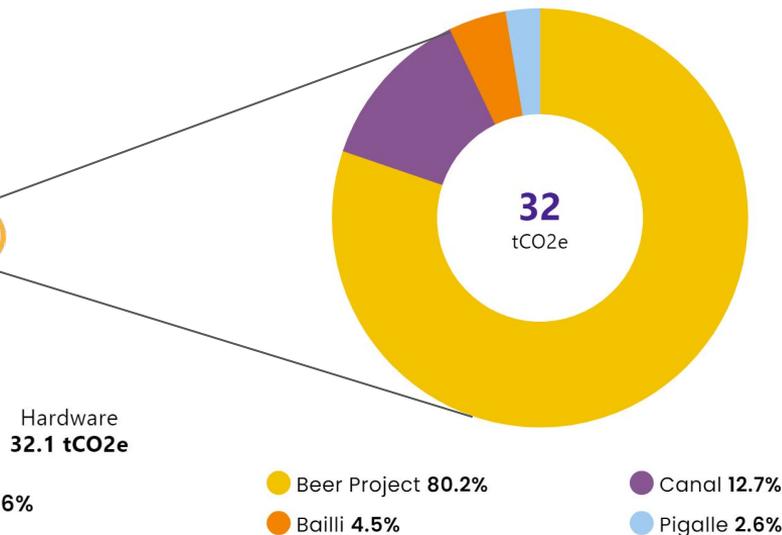
The calculation is done with monetary emission factors from the ADEME database and following our [IT latest methodology](#).

Total emissions (tCO2e)



-  Hardware **91.2%**
-  Digital services **6.6%**
-  Consultation **2.3%**

Focus on hardware



A refurbished phone generates **6 to 7 times less CO2e** emissions than a new one.

To reduce the impact of your digital purchases, many levers of action can be activated: buy refurbished IT equipment rather than new, host your sites and applications close to your customers, eco-design your website ...

RESULTS

IT - consultations

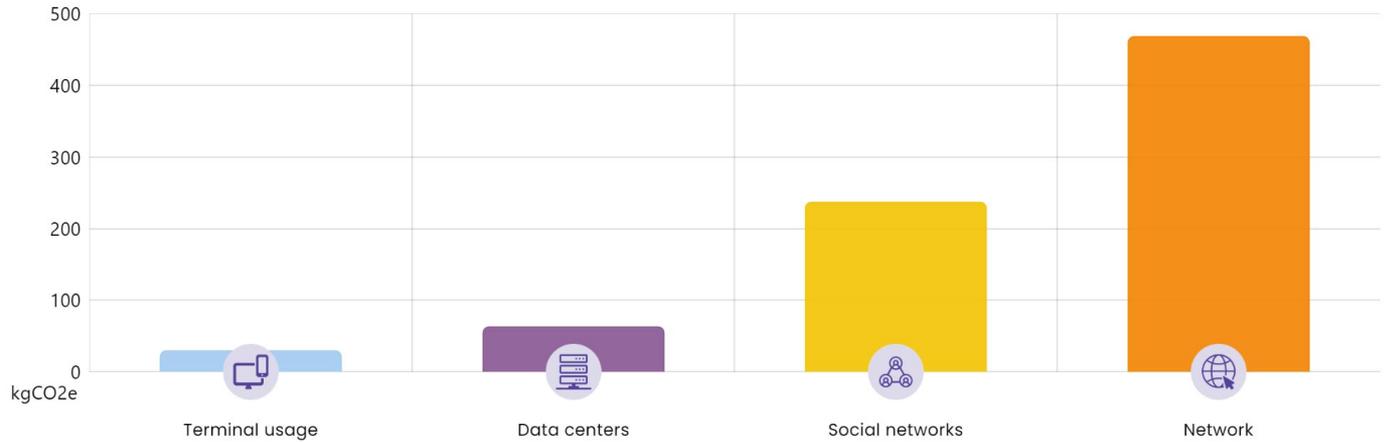
 1 t CO2e



How was this result calculated?

IT data is collected through data input on the platform and accounting documents.

The calculation is done with monetary emission factors from the ADEME database and following our [IT latest methodology](#).



797 kgCO2e were emitted via consultations of your digital tools



Storing data in data centers supplied by **renewable energy** and with a high level of **energy efficiency** limit GHG emissions.



A **rational use** of digital applications and the **training of teams** in responsible digital technology (green code) allow your customers to reduce their CO2e emissions.



As analyzed above, equipment manufacturing is one of the biggest contributors to digital emissions: **extending the life of equipment is decisive.**



CO₂

108 tCO₂e

MEALS



RESULTS

Meals and accommodation - taprooms

 **75 t CO2e**

 **4% of your footprint (7th emission source)**

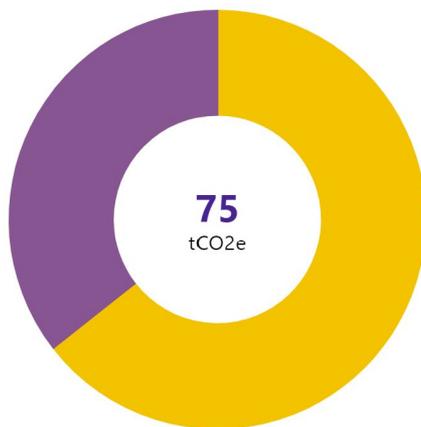
How was this result calculated?

Meals & accommodation data was collected both through the employee survey and the Business travel Excel extract.

Catering data was collected through the accounting documents (general ledger)

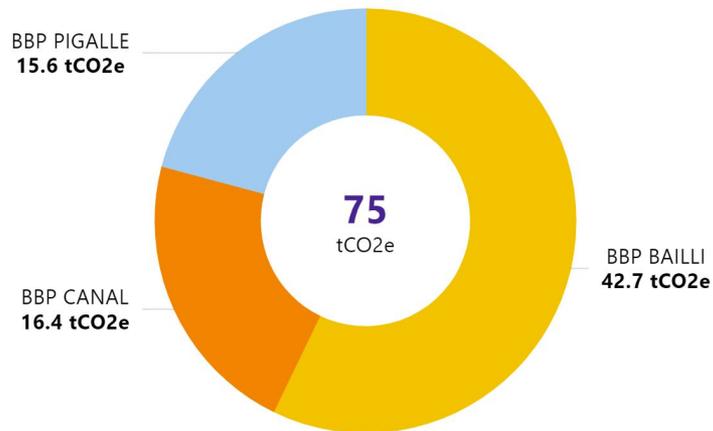
For each type of meal and diet, and each type of meal preparation, emission factors from ADEME and EPA databases are applied.

Total emissions (tCO2e)



 Food and snacks purchased  Drinks (excluding BBP beers)

Distribution per taproom



To reduce the impact of accommodation and catering: make employees aware of the impact of high-carbon diets, reduce the impact of snacks (no water bottles, tea instead of coffee, etc.)

RESULTS

Meals and accommodation - employees

 **83 t CO2e**

 **4% of your footprint (7th emission source)**

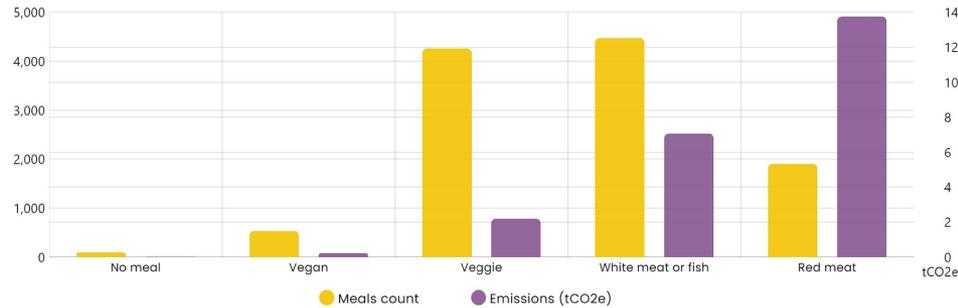
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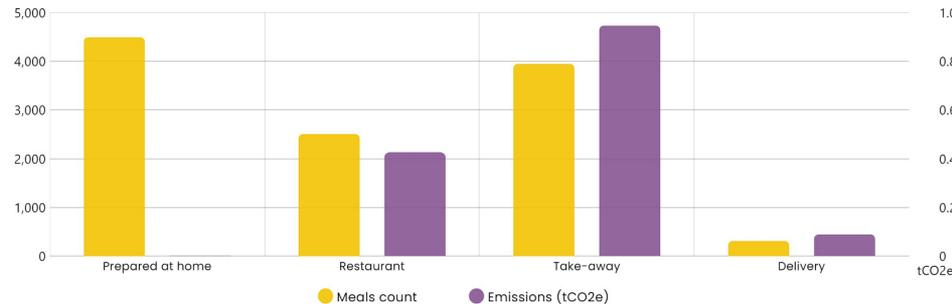
Catering data was collected through the accounting documents (general ledger)

For each type of meal and diet, and each type of meal preparation, emission factors from ADEME and EPA databases are applied.

Diet type



Meal preparation type



Snacks and drinks



2.7 tCO2e

29053 cups of coffee



481 kgCO2e

6868 unprocessed snacks



1395 kgCO2e

2956 processed snacks

Summary

| Category | Emissions (tCO2e) |
|-------------------|-------------------|
| Expenses (bars) | 75 |
| Meals | 25 |
| Hotels | 3 |
| Snacks and drinks | 5 |
| Total | 108 |

To reduce the impact of accommodation and catering: make employees aware of the impact of high-carbon diets, reduce the impact of snacks (no water bottles, tea instead of coffee, etc.)



CO₂

22 tCO₂e

TRIPS

RESULTS

Trips - Commuting

 **7 t CO2e**

 **33% of the trips' footprint**

 **The equivalent of 49 trips
Paris - Marseille by car**

How was this result calculated?

Commuting data was collected through the employee survey and car fleet Excel extract.

The ADEME database and the EPA database both reference emission factors per mile or kilometer travelled for each type of transport.

Travelled kilometers



- Light commercial vehicle 4,000 km
- Urban public transport 60,442 km
- Car 3,286 km
- Motorized two-wheeler 4,305 km
- Bicycle 63,861 km
- By foot 1,985 km
- High-speed train 44,633 km
- Local passenger train 35,495 km

Total emissions (tCO2e)



- Light commercial vehicle 1.9 tCO2e
- Urban public transport 1.6 tCO2e
- Car 0.7 tCO2e
- Motorized two-wheeler 0.1 tCO2e
- Bicycle 0.4 tCO2e
- By foot 0 tCO2e
- High-speed train 0.8 tCO2e
- Local passenger train 1.8 tCO2e

RESULTS

Trips – Business travel

 **15 t CO2e**

 **66% of the trips' footprint**

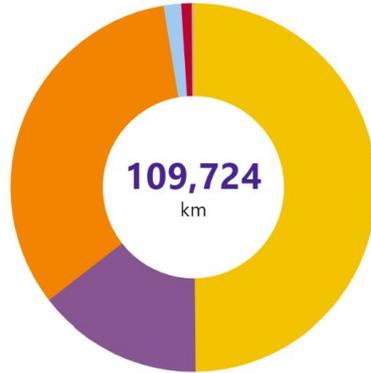
 **Equivalent to 38 Paris-Madrid round trip flights**

 **How was this result calculated?**

Business travel data was collected both through the employee survey and the Business travel Excel extract (only the latter has been used for calculation).

The ADEME database and the EPA database both reference emission factors per mile or kilometer travelled for each type of transport.

Travelled kilometers

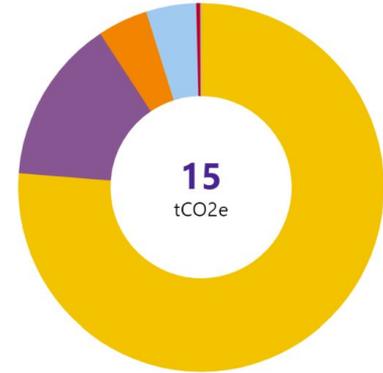


- Plane **54,713 km**
- High-speed train **36,098 km**
- Local passenger train **998 km**
- Car **16,094 km**
- Light commercial vehicle **1,701 km**
- Urban public transport **120 km**



On the 109,725 km of your business trips, 13.5% are flights of less than 1,000 km.

Total emissions (tCO2e)



- Plane **11.3 tCO2e**
- High-speed train **0.7 tCO2e**
- Local passenger train **0.1 tCO2e**
- Car **2.1 tCO2e**
- Light commercial vehicle **0.7 tCO2e**
- Urban public transport **0 tCO2e**



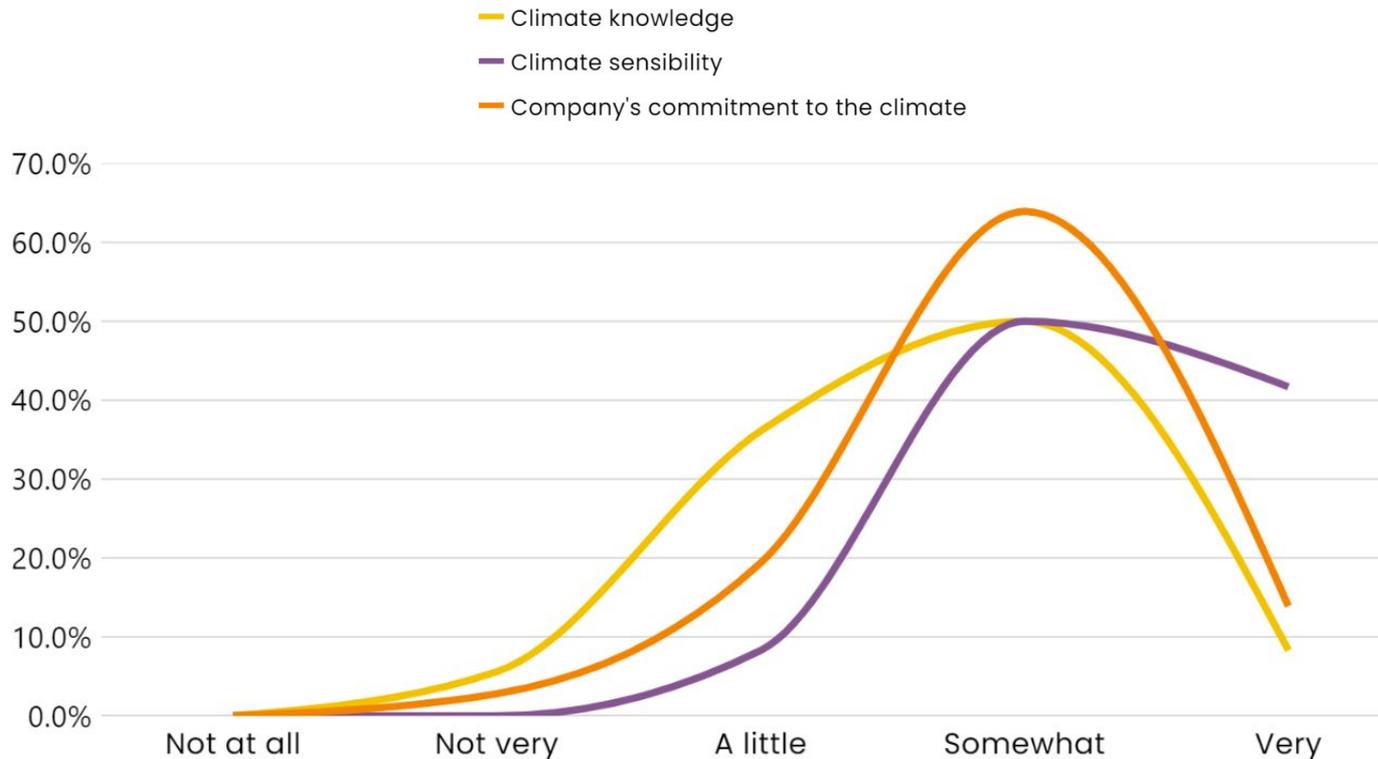
It represents 3.8 tCO2e, or 25.3% of the 15 tCO2e of the carbon footprint of all your business trips.

RESULTS

Employee barometer?

Thanks to this barometer, we monitor your employees' awareness and level of knowledge on the climate issue.

The idea beneath this is to make your employees as knowledgeable as sensible, through awareness-raising action.



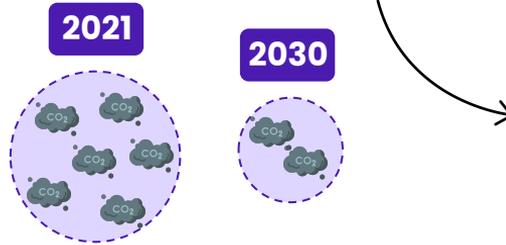
90% of employees consider themselves to be **fairly or very sensitive to climate issues.**

How to TAKE ACTION?

Your company's footprint isn't much compared to Amazon or Facebook, that's for sure.

But that doesn't mean you should downplay the importance of the room for maneuver: in the face of the climate challenge, companies, governments and citizens must all do their part.

In order to **stay below 2°C** and respect the Paris agreement, there is still a certain amount of CO₂e that we can emit until 2050 on a global scale: this is our **global carbon budget**.



This budget is then **disaggregated** at the level of each country, each economic sector, and each company, which is assigned an individual carbon budget.

"**Doing your part**" is therefore a commitment not to exceed your carbon budget.

4 steps:

1 Carbon assessment



2 Setting reduction goals



3 Implementing a Climate Action Plan



4 Tracking your carbon footprint



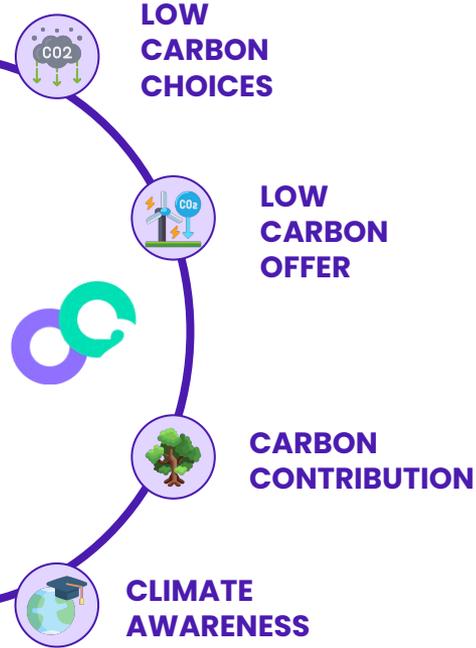
Climate action – 4 ways to act



What is the Net Zero Initiative framework?

In order to limit the temperature increase to +1.5°C compared to the pre-industrial period, climate science requires us to reach a balance between global CO₂ emissions and global CO₂ removals by 2050. This balance is called global carbon neutrality, or "net zero emissions".

To achieve net zero, the two levers to be used at the global and national levels are reducing emissions and increasing carbon sinks.



Implement **actions** that will directly reduce your company's emissions.

To reduce emissions in your **value chain**, your first lever of action is your customers.

Support the **decarbonization** of other sectors outside of your value chain.

Make your stakeholders (customers, suppliers, employees, etc.) **aware** of the climate breakdown.



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Thank you!

