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Decarbonising live music collectively!

Déclic - Report

Analysis of 18 carbon footprints from representative organisations in the French live music sector





ekodev

The Déclic project:

Decarbonising live music collectively



























Thank you to the Périscope (a concert venue based in Lyon, member of FEDELIMA and SMA) for their assistance in translating this document.

The organisations behind the project

Founded in 2013, **FEDELIMA** (Federation of Live Music Venues) is a national network that brings together nonprofit venues and projects dedicated to live music across France. The federation supports its members in anticipating cultural, ecological, economic, technological, political, and social changes whil fostering their development through complementarity and cooperation. Its methods are collective, participative, and inclusive, engaging with professionals, public and territorial partners, artists, and broader civil society.

SMA (Live Music Union), established in 2005, is the union for the live music sector and now ecompasses over 600 organizations. It represents festivals, concert venues (including state-labeled SMAC venues), show producers, record labels, training centers, radio stations, as well as federations and networks. These independent and mostly associative companies work for the general interest and cultural diversity, notably by supporting artists' expression and public access to culture. They advocate for limited profitability.

Service Provider:

Ekodev is a consultancy agency that assists organisations and territories in developing and operationally implementing an ambitious sustainable development strategy to address new social and environmental challenges. Following a co-construction and knowledge-sharing approach, the Déclic project was overseen by a steering committee, a technical committee, and a partners' committee.

Partners:

- This initiative is supported by the State under the « Supporting Green Alternatives in Culture » programme, which is part of the cultural and creative industries (CCI) sector of France 2030, and is managed by the Caisse des Dépôts
- With the support of the National Music Centre.
- In collaboration with the Climate Academy for the launch event and the hosting the Déclic meetings.

→ Develop a strategy for ecological transition

→ Provide effective tools to reduce the carbon and environmental footprint of live music

After recognising the need for resources, tools, support, and human and financial means among their members, **FEDELIMA** and **SMA** launched an unprecedented collective initiative with **18 representative organisations** (concert venues, festivals, touring agencies, training centres) from the live music sector.

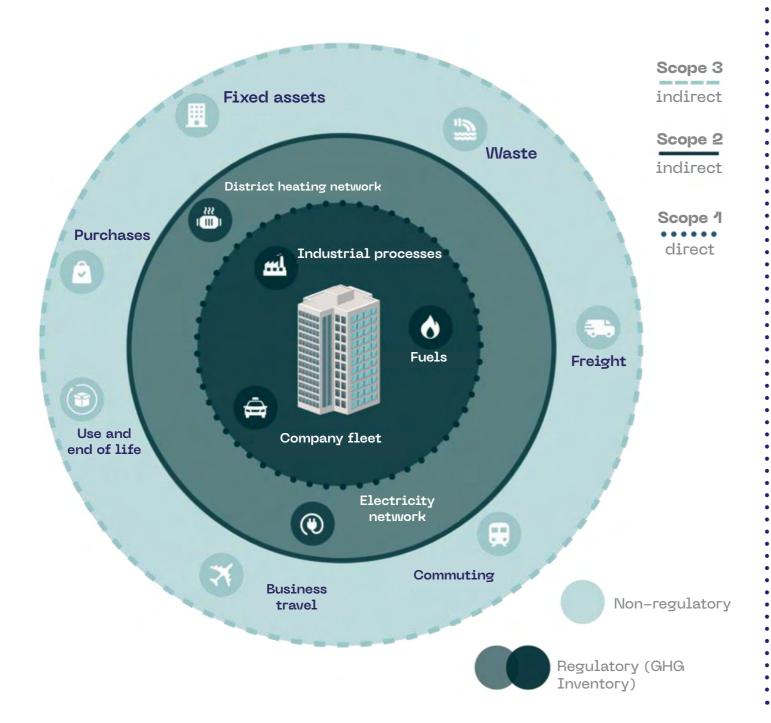
The objectives are:

- To collect data on the environmental impact of the sector across different types of structures and consolidate existing knowledge;
- To define a strategy and an action plan to support the sector's ecological transition in line with environmental challenges and aligned with the objectives of the National Low Carbon Strategy.

This document presents a comparative analysis of the 18 carbon footprint conducted as part of the Déclic project.

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Methodology and scope of the analysis



In 2004, ADEME published a methodology to quantify the greenhouse gas emissions of organisations, known as Bilan Carbone®. This approach takes into account all greenhouse gas (GHG) emissions, whether direct or indirect, inherent to the physical processes necessary for an organisation's operation. Emissions are classified into three categories: direct emissions (Scope 1), indirect emissions related to energy (Scope 2), and other indirect emissions (Scope 3). Considering Scope 3 is essential to ensure transparency and accuracy of the carbon footprint, as well as to establish an effective Corporate Social Responsibility (CSR) policy.

The first step of the Déclic project was to select a group of 18 representative organisations from FEDELIMA and SMA members to conduct their own carbon footprint. This initial phase also served to determine the scope of the analysis (see the diagram below).

The reference period selected spans from March 2022 to March 2023. This period was chosen due to the impacts of the health crisis, making it the most recent and representative of a full year of 'normal' activity and attendance for organisations. As a result, it provides a solid basis for data extraction that accurately reflects regular activity.

To enhance data collection and diversify the types of organisations represented in the Déclic project, 7 other members of FEDELIMA and SMA usere involved. Their participation was realised in two ways: by sharing data from previously established carbon footprints and/or by contributing to the various phases of methodology development and consultations. The information from these reports was integrated when the methodology allowed.

Example of the scope of analyses for concert venues

Purchases

- . Team catering Public catering
- . Drinks (bar)
- . Intangible purchases (especially team accommodation)
- . Goodies
- . Merchandising (t-shirts, eco-friendly cups...)
- . Office supplies purchases
- . Consumables purchases (tape, small cables, etc.)
- . Service purchases (indirect contracts through a group (security, insurance...))
- . Internet deployment
- . Cleaning
- . Communication

Audience travel

Staff travel

- . Professional travel for staff, contributors, contract workers, volunteers
- . Commuting to and from work

Building consumption

- . Energy
- . Air conditioning
- . Water

Transport of goods

- . Specialised equipment
- . Merchandising
- . Stage setup

Travel of artistic teams and equipment

Concert venue

Waste

- . Office waste
- . Public waste

Digital

- . Website visits
- . Number of requests (e.g. ticket purchases)
- . Videos
- . Streaming platforms

Fixed assets

- . Equipment (sound and lighting systems, etc.)
- . Buildings
- . Sets
- . Fleet
- . Instruments
- . Furniture

Presentation of the participating organisations

The Déclic sample group

18 organisations representing the nonprofit live music sector

8 venues





























4 touring agencies















Les Nuits













Venues

Art'cade

200 seats 10,800 spectators* Rural 40ccitanie Multi-sites

Bonjour Minuit

Small venues

420 seats 9,400 spectators* Urban 4Brittany

L'Autre Canal

1,293 seats 58,000 spectators* 4 rehearsal studios Urban Grand Est

capacity venues

Large

La Belle Électrique

1,083 seats 61,000 spectators* Catering Urban Auvergne-Rhône-Alpes

La Clef

530 seats
20,000 spectators*
3 rehearsal studios
Urban
Ile-de-France
Multi-activities

Le Temps Machine

600 seats
14,500 spectators*
3 rehearsal studios
Urban
Centre-Val de Loire

La Luciole

696 seats
12,500 spectators*
1 rehearsal studio
Urban with rural setting
Normandy

Kabardock

894 seats
24,000 spectators*
3 rehearsal studios
Urban
French overseas region
La Réunion

^{*}Figures taken from Déclic carbon footprints, using March 2022 to March 2023 as the reference year.

Festivals

Small-scale festival

Festival de Thau

Capacity of 2,500 people per day 9 days in summer Urban / Multi-sites / Outdoor and indoor Occitanie

Large-scale festival

Les Nuits Secrètes

Capacity of 20,000 people per day 3 days in summer Rural / Multi-site Camping Outdoors and indoors Hauts-de-France

Festival de La Paille

Capacity of 12,500 people per day 2 days in summer Rural Camping Outdoors Bourgogne-Franche-Comté

Les Suds à Arles

Capacity 7,000 people per day 7 days in summer Urban / Multi-sites Outdoor World music Sud-PACA

Les Z'Éclectiques

Capacity 8,000 people per day 4 editions in each season - 14 days Rural / Multi-site Outdoor and indoor Pays de la Loire

^{*} Figures taken from Déclic carbon footprints, with March 2022 to March 2023 as the reference year.

Panel for training centres

Le CEM

Urban
Normandie
150 places
1,220 students
6 rehearsal studios
1 concert hall

Place for supportunig musical practices

Déclic's associate members

Concert venues

Périscope

220 seats
11,498 spectators*
Urban
Auvergne-Rhône-Alpes
Specialising in jazz and improvised music

4Écluses

280 seats
17,243 spectators*
Urban
Hauts-de-France

La Tannerie

550 seats Urban Auvergne-Rhône-Alpes

Petit Bain

450 seats Urban Île-de-France Catering

La Rodia

1,100 seats 38,000 spectators* Urban Bourgogne-Franche-Comté

Stereolux

1,293 seats
119,942 spectators*
Urban
Pays de la Loire
Catering and digital arts

La Carène

1,300 seats 40,100 spectators* Urban Bretagne Associate members

Festival

Hadra Trance Festival

8,000 people per day 17,243 spectators* Rural Auvergne-Rhône-Alpes

^{*} Figures taken from carbon audits previously carried out by the associated structures

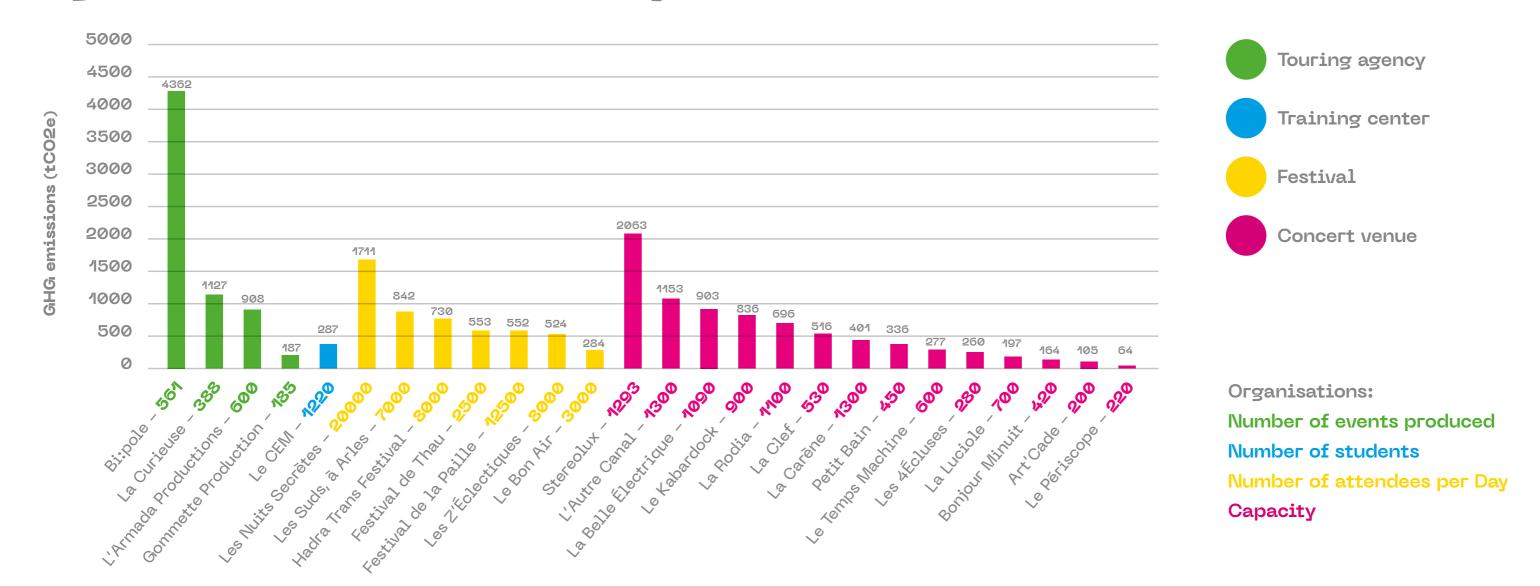
Overall results
Analysis of the
Déclic panel

Overall comparison of GHG emissions from oganisations

For each type, the organisations with the highest emissions are generally the largest in terms of size (capacity, annual income). However, this observation is more nuanced for concert venues, as emissions are highly dependent on public transport connections and the additional activities offered by the venues (beyond concerts).

Due to the significant differences in activities, it is not appropriate to compare organisations that do not carry out similar activities.

Comparison of GHG emissions from organisations (in tCO2e over one year)

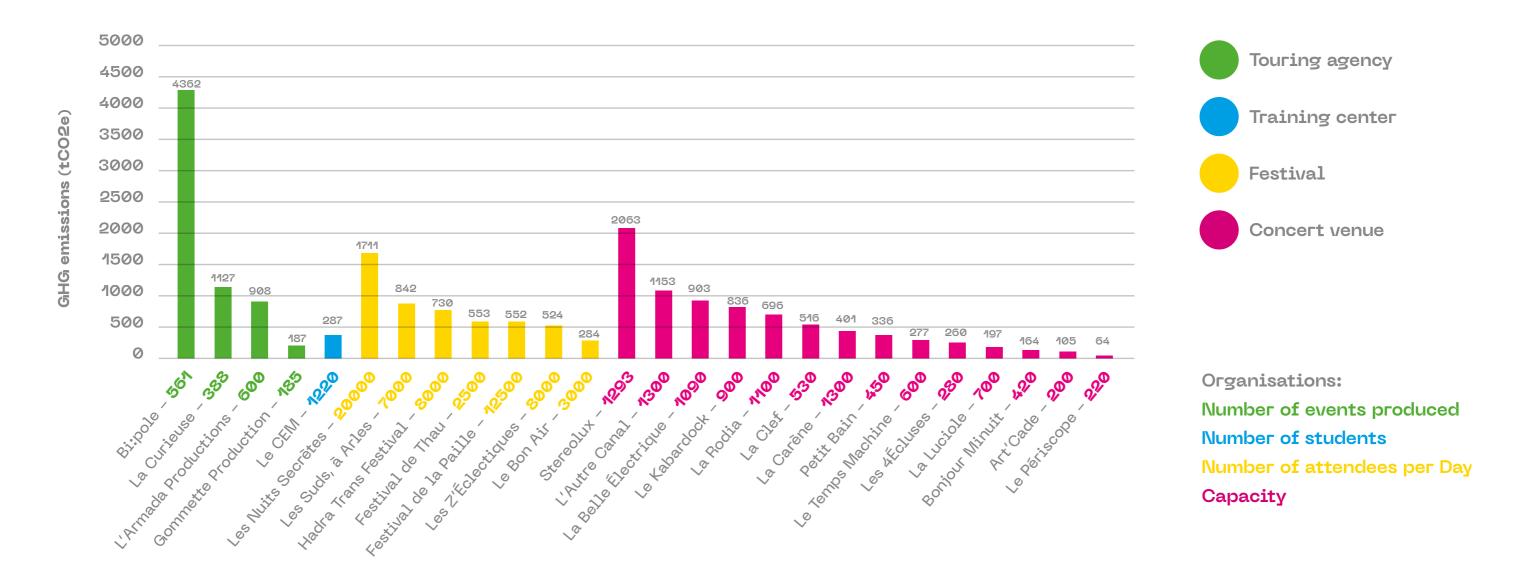


Overall comparison of GHG emissions per k€ of sales

The organisation's revenues is a measure of its activity. Measuring the carbon impact per $k \in O$ of sales provides an initial benchmark for comparison. Here, we observe that the emission intensities of touring agencies (1600 kgCO2e/ $k \in O$) appear higher than those of festivals (580 kgCO2e/ $k \in O$) and concert venues (390 kgCO2e/ $k \in O$), which are comparable. It is important to note that the scope of the studies differs for the various types of organisations.

ADEME has estimated an average monetary emissions intensity for « Creative, artistic and entertainment activities » which includes only the organisation's own activities and artists' travel (excluding audience travel), corresponding to 210 kgCO2e/€k.

Comparison of GHG emissions by organisation per €k of sales (in kgCO2e/€k of sales)

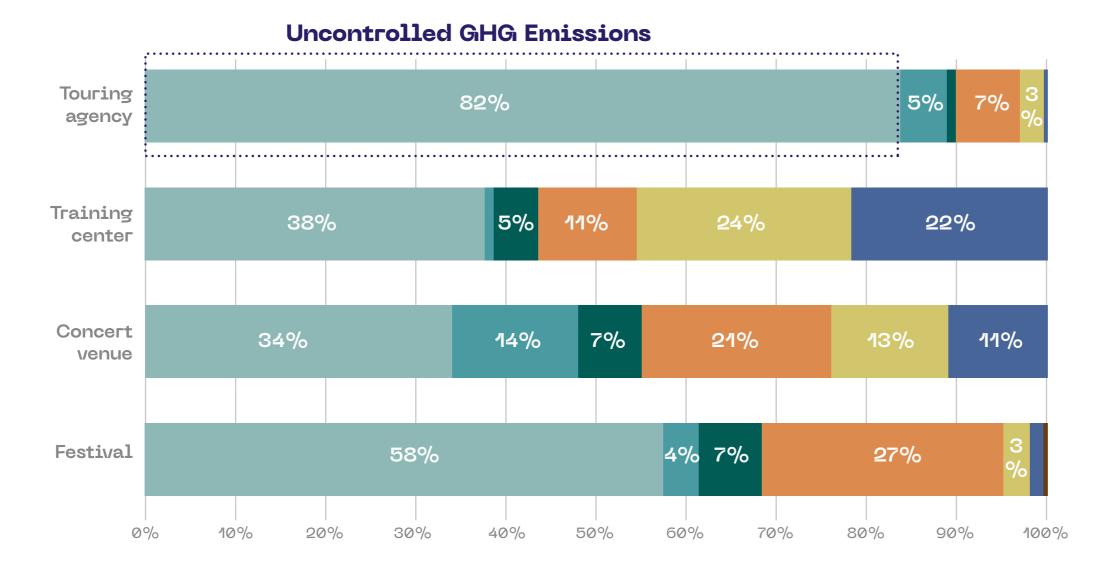


Overall analysis: average breakdown of GHG emissions by category

For touring agencies, the main source of emissions is by far audience travel. Although the options to reduce these emissions are limited for these organisations, they are included in the Bilan Carbone[®] because the activities of the touring agencies generate audience travel. The estimated emissions linked to audiences at concerts produced by these structures have been extrapolated from the data for the other entities in the panel.

For training centres, the majority of emissions are generated by students travelling to attend courses.

In the case of concert venues and festivals, emissions are also predominantly caused by audience travel. Purchases (mainly catering/bar purchases for the festivals and venues in question) account for an average of 27% of the emissions of their emissions. Finally, artist travel is another significant factor for venues and festivals.





Audience travel



Artist travel



Other travel



Purchases / inputs



Fixed assets



Energy - Waste



Other

Please note: the distribution by category opposite represents an average of the shares attributed to each category in each Bilan Carbone® of the panel. Therefore, these data should be interpreted with caution. For instance, Kabardock, due to its unique geographical location, significantly increases the impact of artists' travel in this mix (which would be 41% instead of 44%).

Analysis by type of structure

Iraining centres

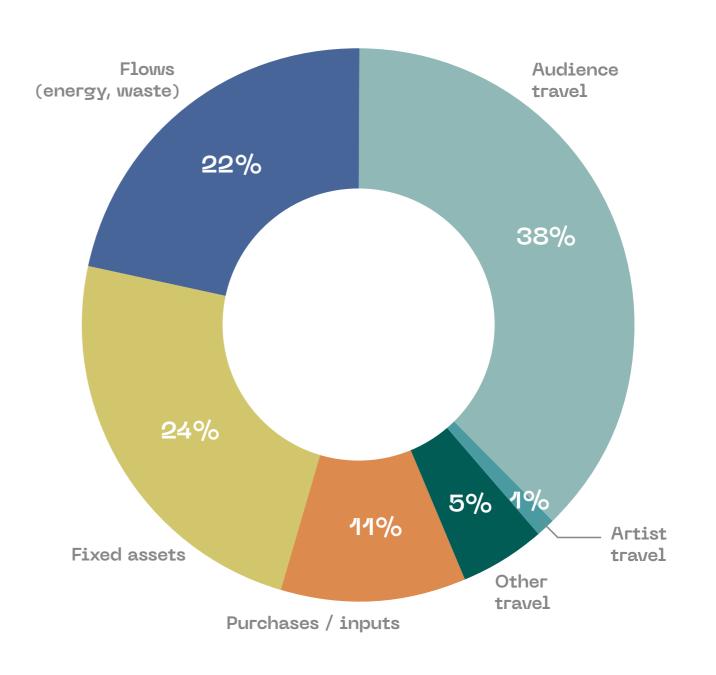
Carbon footprint of the training centre

Please note that within the Déclic panel, only one organisation has been categorised as a training centre. Therefore, the analyses relate solely to the CEM's Bilan Carbone®, and no comparison with other organisations has been possible.

Breakdown of GHG emissions for a training centre (the CEM)

In 2022, the CEM emitted 287 tCO2e

For a training centre like the CEM, the main source of emissions is student travel, including both professional and amateur musicians. In the specific case of the CEM, fixed assets play a significant role in the balance sheet due to renovation work. Musical instruments do not feature prominently in the Bilan Carbone® because they are not replaced regularly. Energy consumption for heating the buildings and purchases (particularly for the bar) are also significant sources of greenhouse gas emissions.



Analysis by types of structures

concert venues

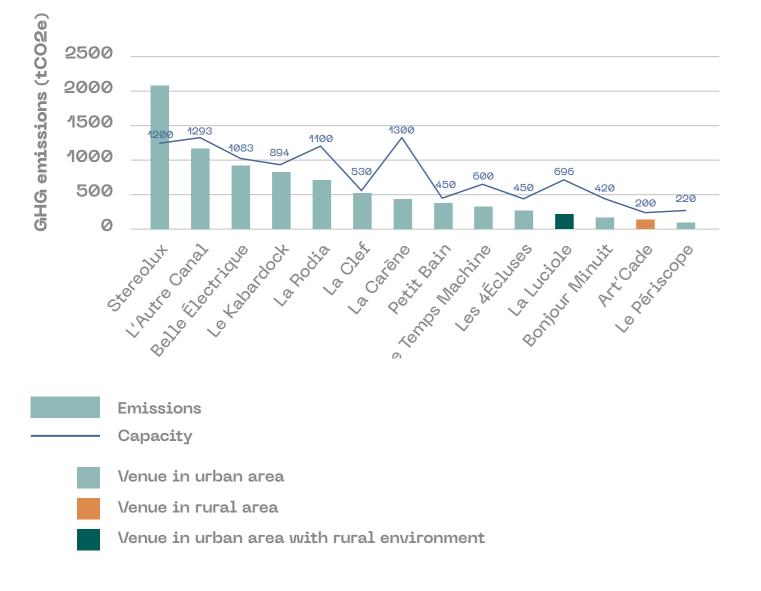
Concert venues Average carbon footprint

The venues in the Déclic panel emitted an average of 570 tCO2e.

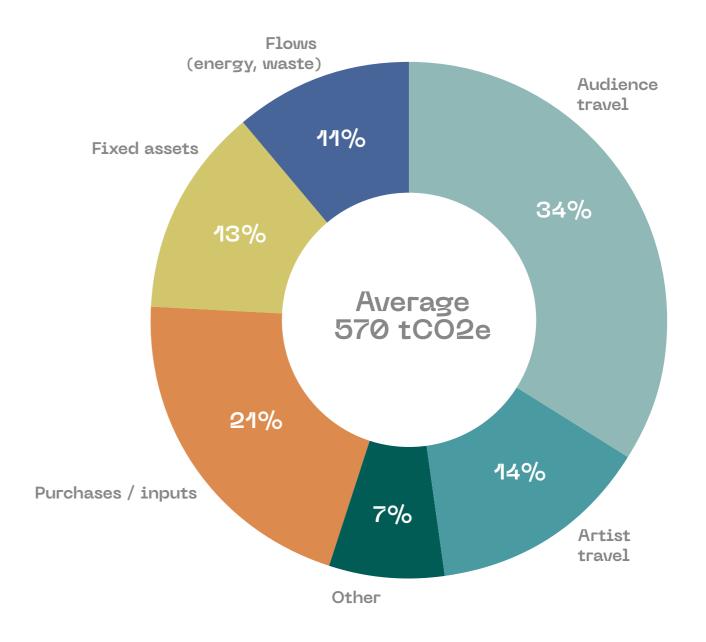
Their emissions are primarily attributed to:

- Audience travel (34%), due to their number in comparison with artists or staff
- Purchases, particularly related to catering and bar services for the venues in question (21% of total emissions)
- Artist travel (14%)

GHG emissions from concert venues (including associated structures), in tCO2e, compared to the venue's capacity

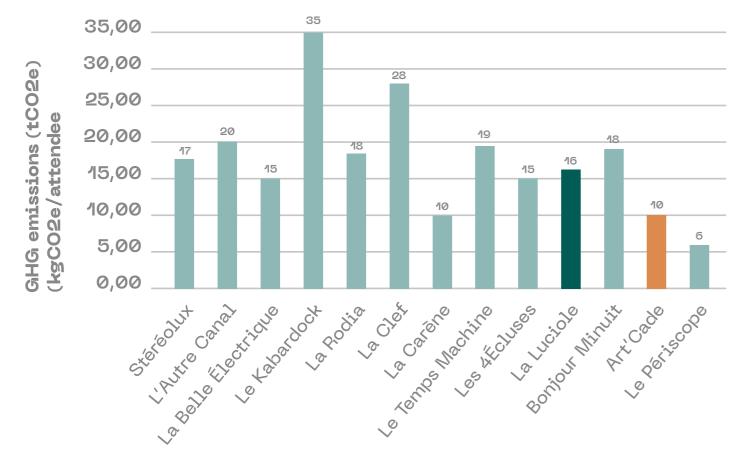


Breakdown of GHG emissions for an average concert venue



Concert venues GHG emissions per attendee for each venue

GHG emissions per attendee for each venue (in kgCO2e/attendee)



Venue in urban area

Venue in rural area

Venue in urban area with rural environment

When attending a concert at an average venue on the Déclic panel, the average audience member emits 17 kgCO2e.

The results vary depending on the venue and are influenced by specific contextual factors. For instance, audiences at Kabardock (where the emissions are highest) tend to emit more GHGs on average than those at Périscope (where the emissions are lowest). This difference is primarily due to artists performing at Kabardock (Réunion Island) often travelling by plane. Additionally, the disparity between the two venues is exacerbated by the fact that Périscope audiences can utilise the Lyon metro, a low-emission mode of transport.

For example, La Clef not only organises concerts but also offers a range of sporting and cultural activities (visual arts, dance, sports, language classes, etc.).

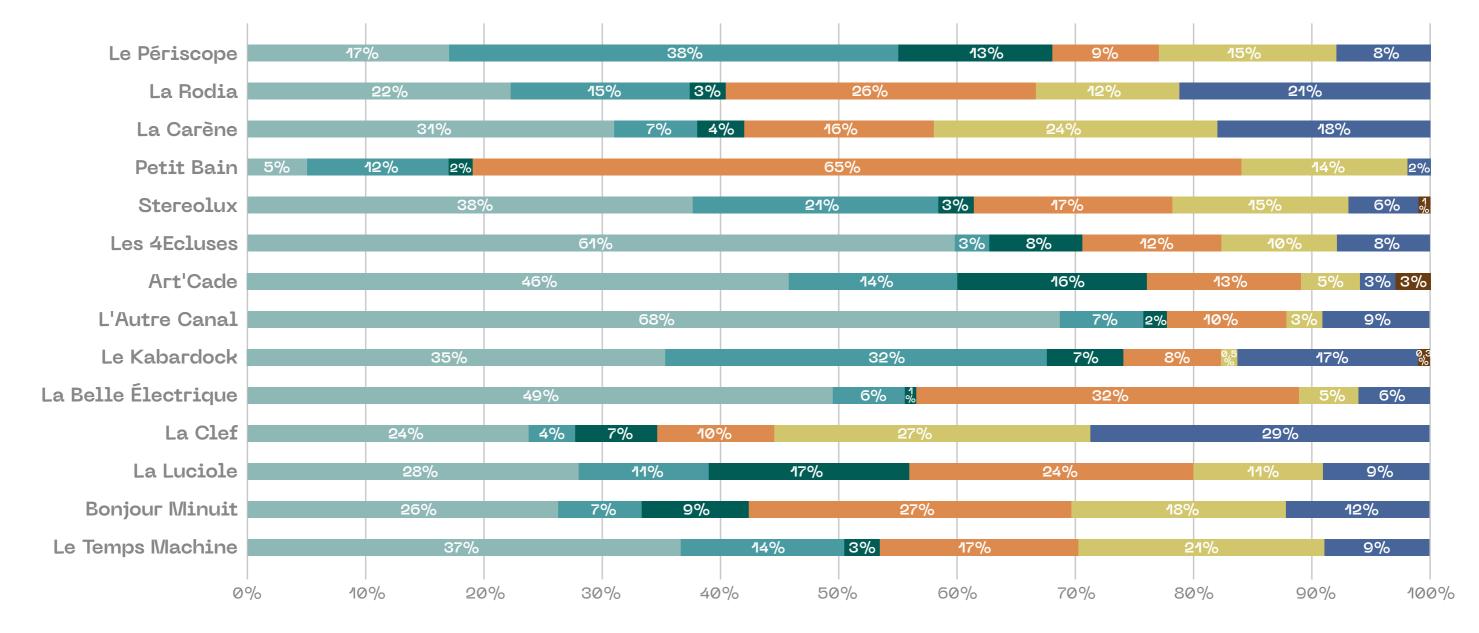
Overall, identifying a trend in average emissions per attendee is difficult because the emissions of the venues depend on their respective geographical contexts, specific features, and the activities offered.

Concert venues Summary of breakdown of GHG emissions by category

The GHG emission profiles of the various venues within the panel vary widely. This variability is attributed to the diversity of activities conducted by the venues (concerts, catering, bar services, rehearsals, etc.), their accessibility by public transport, their location (rural, urban, etc.), and their capacity.

However, it should be noted that the majority of emissions for all concert venues stem from audience travel, as well as travel by artists and artistic teams, along with purchases.

Breakdown of emissions by venue (as a % of total emissions)

















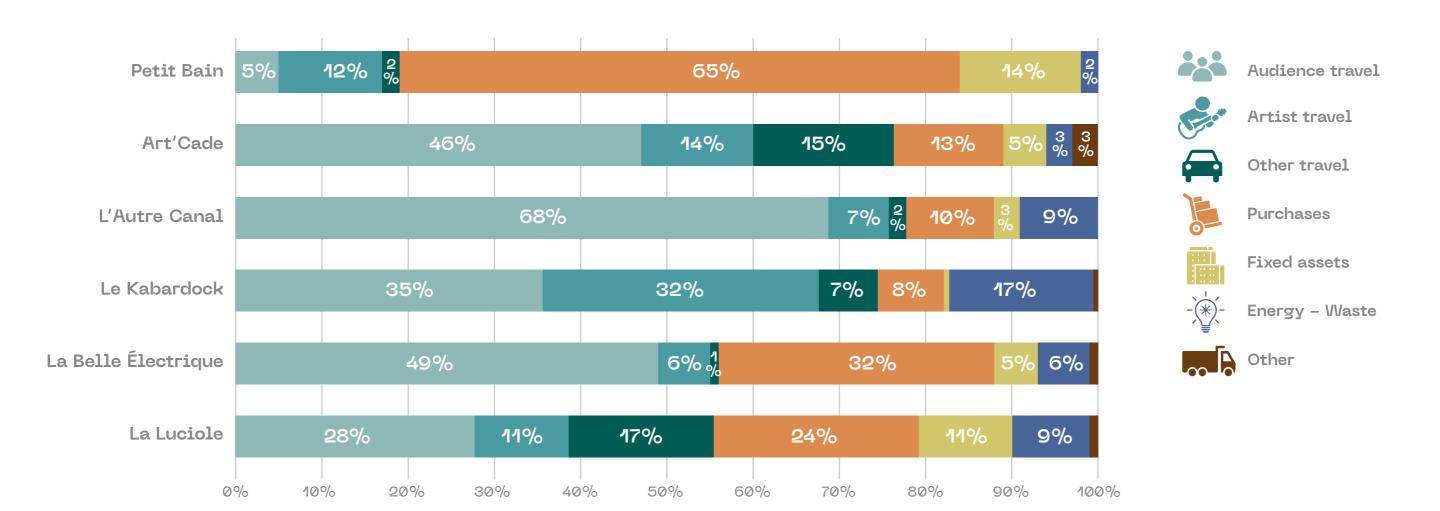
Concert venues A closer look at the breakdown of GHG emissions by category

For instance, in the case of **Petit Bain**, located in the centre of Paris, carbon emissions from attendees are lower due to the excellent public transport coverage. One might assume that **La Belle Électrique** and **L'Autre Canal**, both accessible by tram, would have comparable emission levels. However, a significant proportion of their audiences prefer to travel by car.

Travel for artists is a significant factor for **Kabardock**, as the venue is challenging for international artists to reach except by plane.

At **Art'Cade**, audience travel for concerts and professional events is more pronounced due to the venue's rural location. People are generally more reliant on higher-emission modes of transport.

Breakdown of emissions by venue (as a % of total emissions)



Concert venues Focus on travel

Not all venues have the same scope of activities. In addition to hosting concerts, some may operate a bar or restaurant during the day, while others organise cultural events or hire out rehearsal studios. All these activities generate additional travel for both artists and audiences. To compare venues with the same scope, it is necessary to separate travel by activity and consider only those activities that are common to all venues: the delivery of live performances.

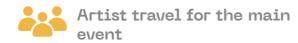
In some cases, these additional activities are quite significant. For example, at Le Temps Machine, travel by local musicians to rehearsal studios exceeds travel by audiences to concerts in terms of cumulative emissions. Unfortunately, an in-depth analysis of musicians' travel to their rehearsal studios was not feasible within the scope of our study. Therefore, the results presented here will only encompass concert hosting activities.

Breakdown of artist and audience travel by venue (in % of emissions)

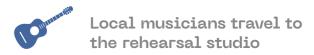












Focus on audience travel to concerts (34%)

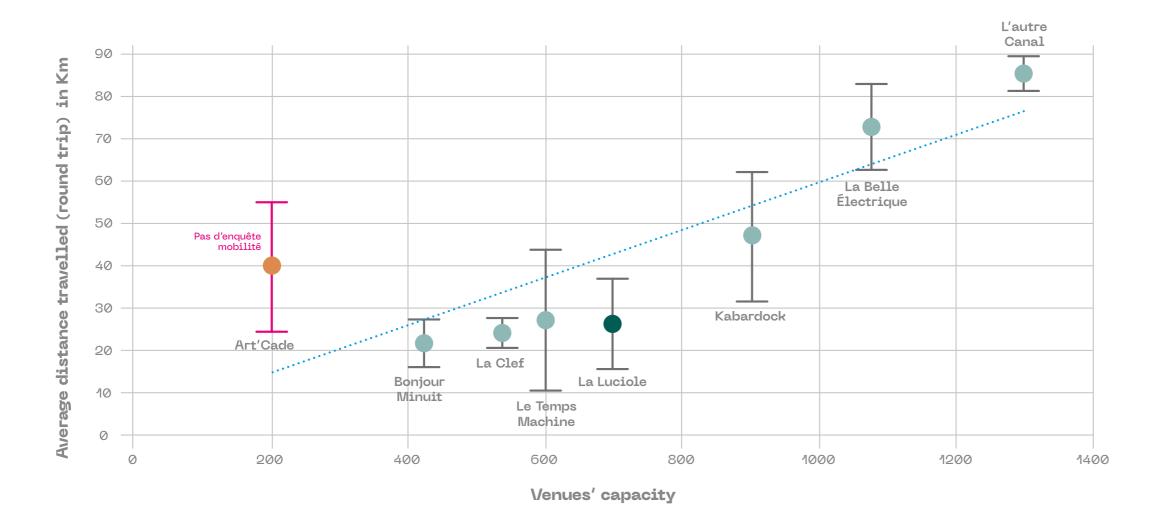
There is a correlation between the average distance travelled by the average audience member and the size of the venue. The larger the venue, the greater the distance travelled by the audience.

An exception to this trend is Art'Cade, which is located in a rural area and is therefore less comparable to the other venues.

The programming of the venues has a significant influence on these results, as the presence of an artist or group can attract audiences from further afield. Larger venues may feature artists with a higher profile and attract a less local audience, which can inflate the average distances travelled by individual audience members.

On average, the audiences on our panel travel 40km round trip to attend concerts.

Average distance travelled (round trip) by an audience member based on venue capacity



Venue in urban area

Venue in rural area

Venue in urban area with rural environment

Focus on modal share of audience travel to concerts (34%)

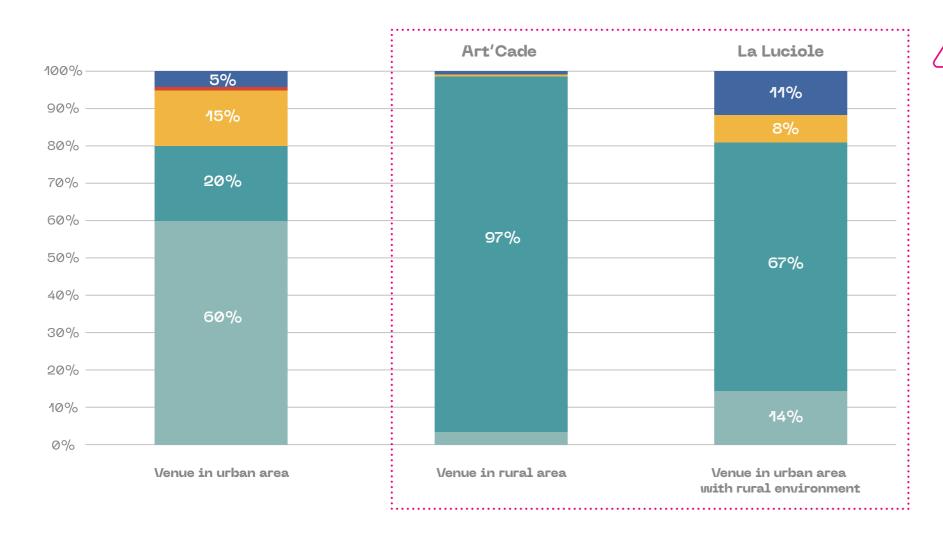
Comparisons in this context are challenging because only one venue was categorised as a rural venue and only one as an urban venue with a rural environment.

Audiences at venues located in rural areas are more reliant on internal combustion vehicles (carpooling or self-driving), as 99% of journeys are made by car or motorbike. However, there is a high rate of carpooling.

Venues situated in urban areas are also heavily dependent on combustion-powered vehicles. While the rate of public transport use is higher than in rural venues, it still falls significantly short compared to the reliance on internal combustion vehicles.

Lastly, planes are only used for large-capacity venues, which include urban venues in the case of Déclic.

Modal audience share by type of venue (as a percentage of distance travelled – kilometres)





Individual thermal vehicle



Carpooling



Other journeys



Public transport



Plane



Soft mobility

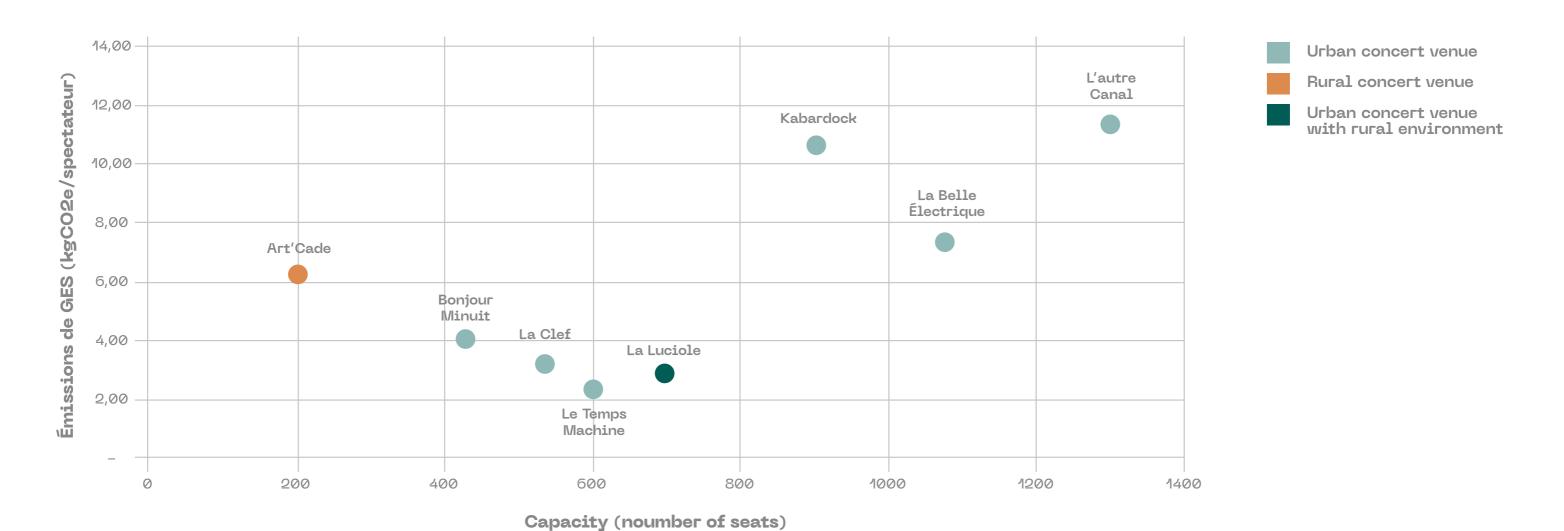
Focus on audience travel for concerts (34%)

These analyses build upon those concerning the distances travelled and modes of transport used by audiences at the various venues, revealing similar trends.

Venues with larger capacities attract audiences from greater distances, who may potentially use more carbon-intensive modes of transport, such as air travel.

At L'Autre Canal, travel by plane accounts for 3% of the total kilometres travelled, but represents 5% of audience travel emissions.

Emissions from the travel of an average concert-goer per person - according to the venue capacity



Concert venues Focus on artist travel (14%)

Kabardock's location on an island (La Réunion) accounts for the predominance of air travel for artists, with 95% of them using this mode of transport. This results in a significant increase in the carbon footprint of artistic travel associated with this venue.

In contrast, the location of the venues does not appear to significantly influence the use of public transport. Although venues situated in urban areas benefit more from the rail network, the distances travelled by artists by train account for less than 20% of their journeys.

Train

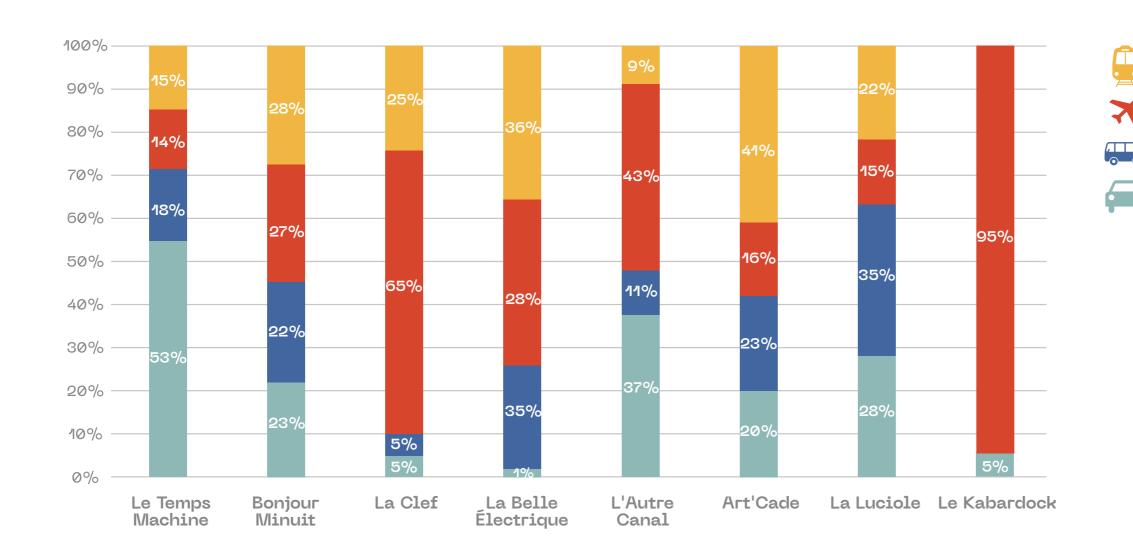
Plane

Саг

Tour Bus, van

Conversely, combustion vehicles (cars, vans, tour buses) remain the preferred means of transport for artists travelling to the venues.

Breakdown of artists' modes of transport (as a percentage of kilometres travelled)



Concert venues Focus on artist travel (14%)

Methodological note:

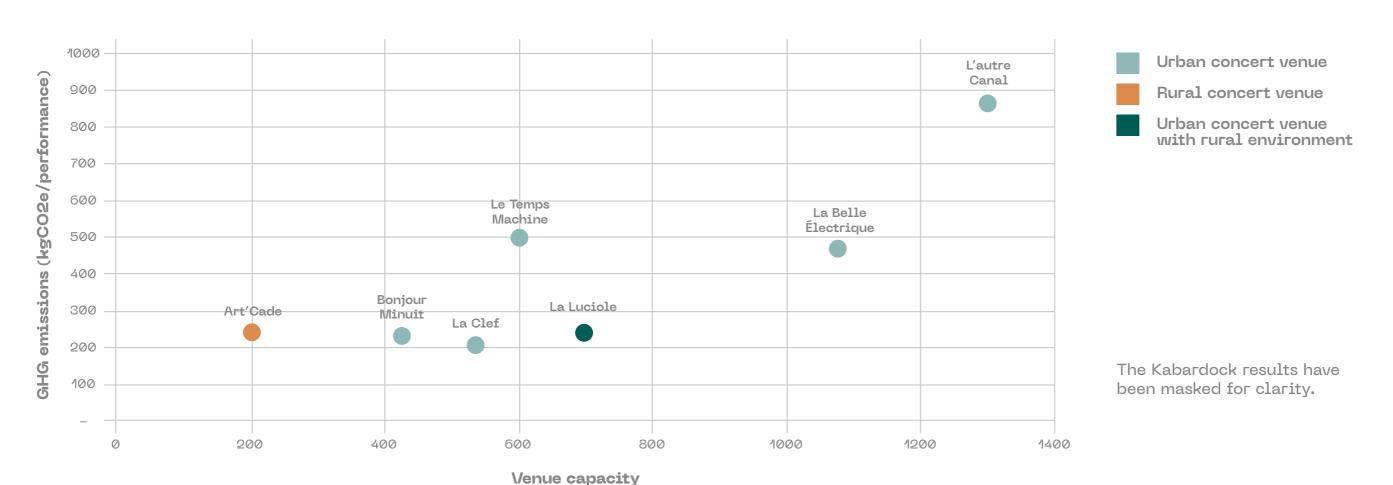
The purpose of analysing artist travel here is to assess **the impact of a specific date within a tour**. Ideally, we would have measured the total footprint of the tour and subsequently broken it down by date. However, due to insufficient data, our method focused on assessing the emissions linked to return journeys from the country of origin, particularly for international artists, distributed across all the dates of the tour. We also considered the emissions generated by travel between the venues of previous and subsequent concerts.

There is a correlation between the average emissions generated by an artist for a performance and the average capacity of a venue. Venues with larger capacities tend to programme artists who come from further afield. This correlation is directly linked to the programming choices made by the venues.

The results for Kabardock have been obscured on the graph to simplify reading. On average, each performance at Kabardock involves artists travelling to the venue, generating emissions of around 9.5 tonnes of CO2 equivalent.

On average, travel by artists for a performance generates 400 kg of CO2 equivalent.

Emissions generated by artists travelling to a performance, according to venue capacity (kgCO2e/performance)

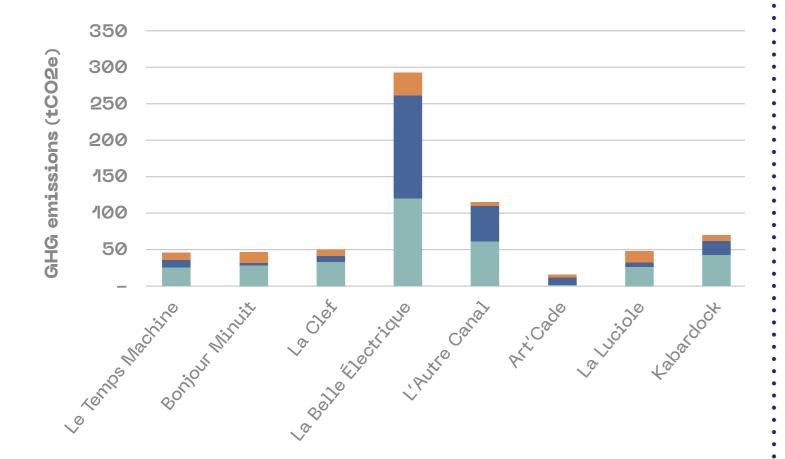


Focus on purchases and inputs (21%)

It is evident that emissions from purchases increase in a fairly linear fashion with the rise in audience numbers. When a venue offers catering services, this often accounts for a significant proportion of total emissions from purchases. At La Belle Électrique, for instance, the catering service represents nearly half of these emissions.

On average, each audience member generates approximately 3.2 kg of CO2 equivalent from purchases and inputs.

Details of input emissions for concert venues (tCO2e)

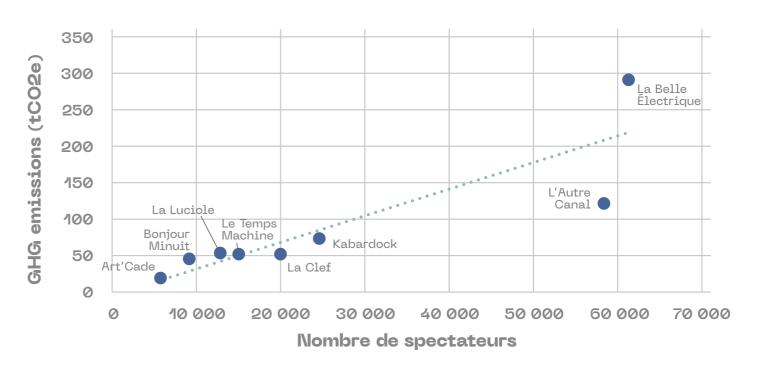


Service purchases





Input emissions according to the number of concert venue visitors (tCO2e)

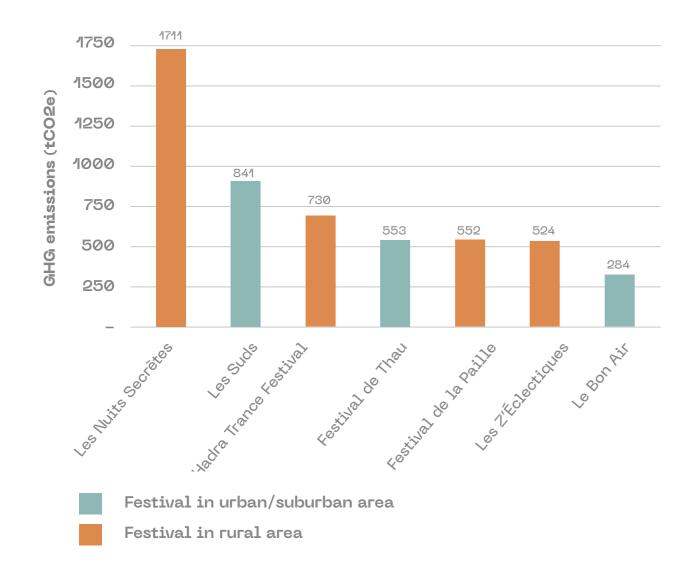


Analysis by type of structure

estivals

Festivals Carbon footprint average

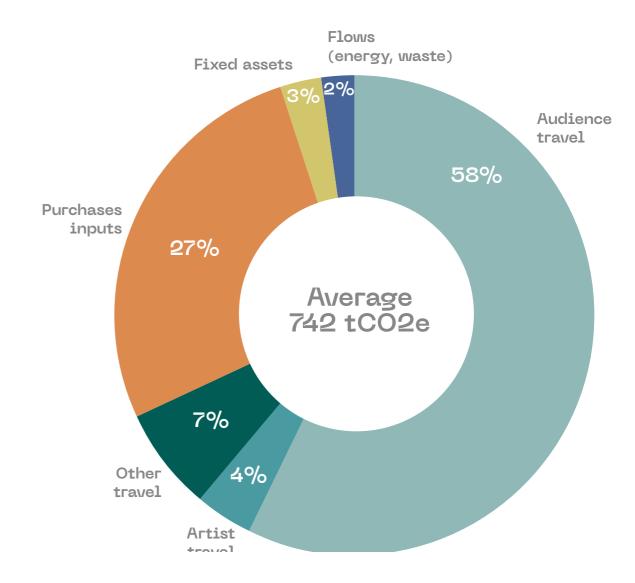
Festival broadcasts (including associated structures), in tCO2e



The festivals in the Déclic panel emitted an average of 742 tCO2e. Their emissions are mainly due to:

- Travel, and in particular travel by festival-goers (58%), due to their number in comparison with the artists or staff
- Inputs, particularly catering (27% of total emissions)
- Travel by artists (4%)

Breakdown of GHG emissions for an average festival



This distribution by item represents an average of the shares attributed to each item in each Bilan Carbone® (Carbon footprint assessment); it is therefore recommended that these data be interpreted with caution.

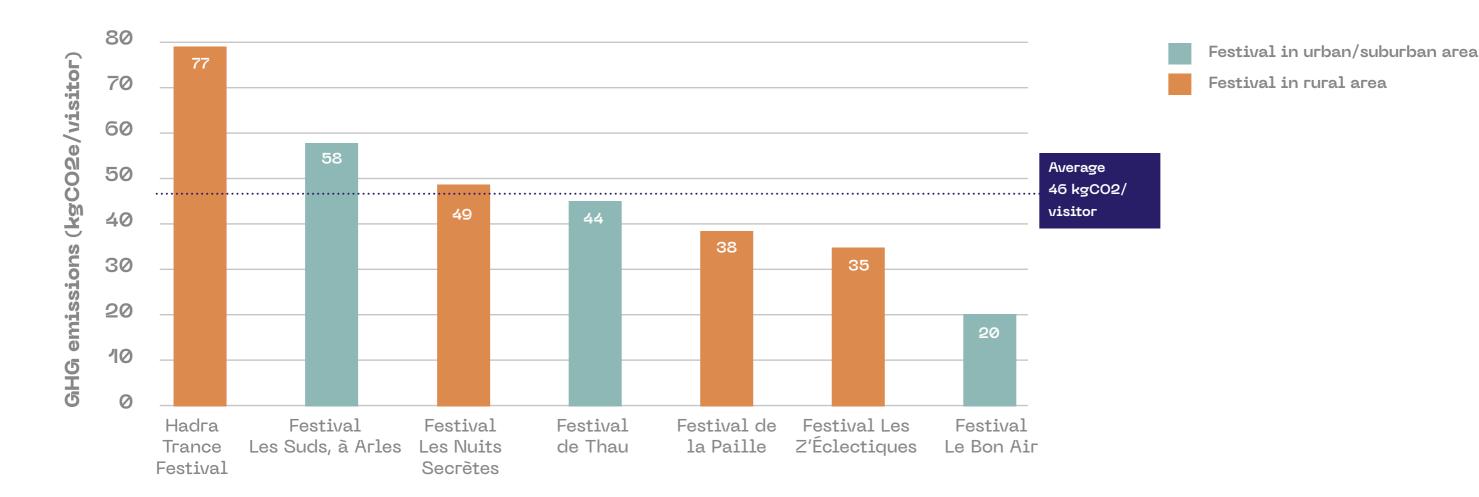
Festivals GHG emissions emissions per audience for each structure

When attending a festival on the Déclic panel, an audience member emits an average of 46 kgCO2e.

These results vary from one festival to another and depend on each festival's specific characteristics. For instance, a festival-goer at the Hadra Trance Festival emits more on average than an attendee at Bon Air, primarily due to the modes of transport used and the average distance travelled. Hadra's more niche musical aesthetic (psytrance) attracts an audience that is willing to travel longer distances. This is also true for the Les Suds festival in Arles (world music).

On average, urban festivals have a lower emissions intensity per audience member, owing to better public transport links and a higher rate of public transport usage.

Comparison of emissions per audience for each festival (kgCO2e/guest)

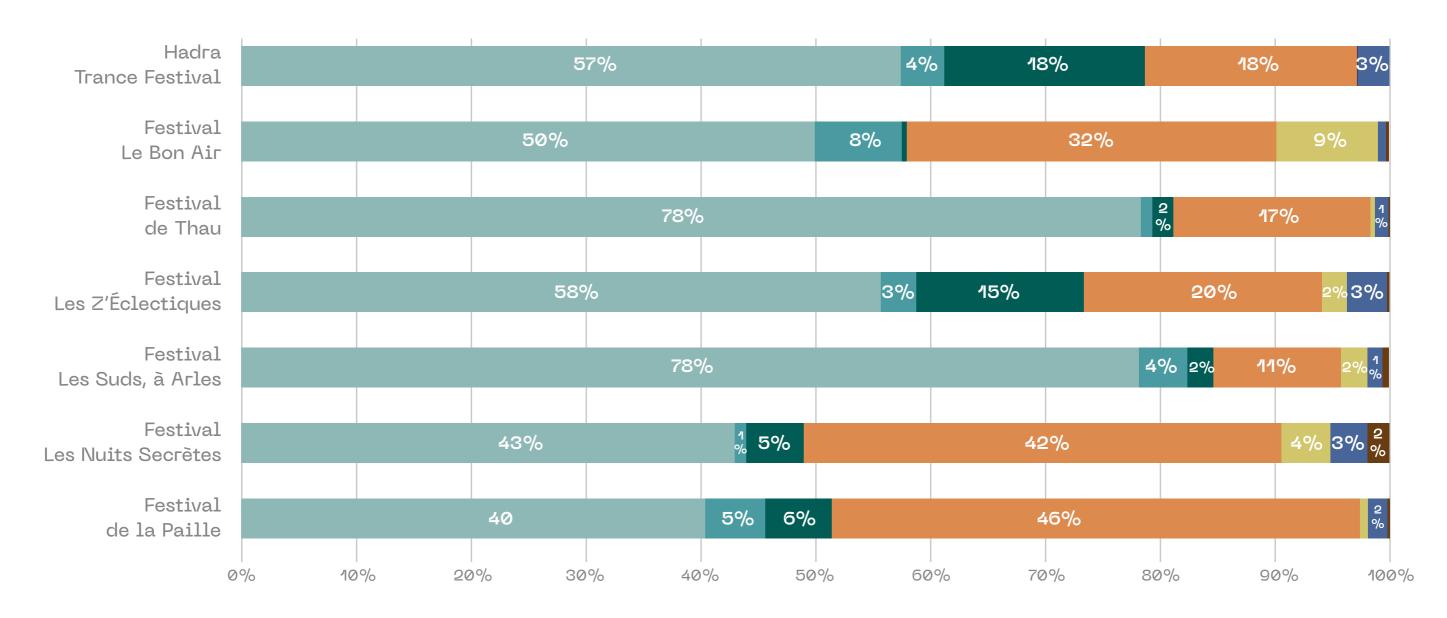


Festivals

Focus on the breakdown of GHG emissions by category

The breakdown of GHG emissions by category for each festival confirms that **visitor travel is the largest category**, or one of the two largest categories, for all festivals. Inputs represent the second largest item, primarly due to stage equipment hire, infrastructure and catering.

Zoom on the breakdown by category per festival (in % of emissions)











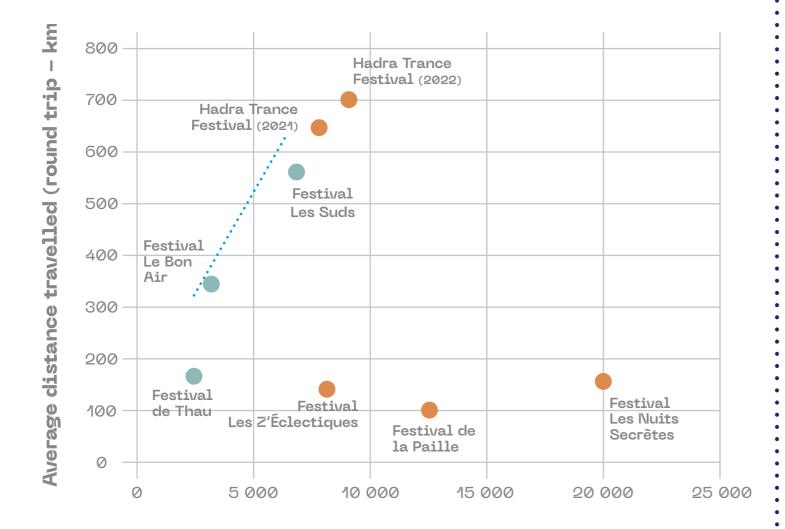






Festivals Focus on audience travel (58%)

Study of the correlation between the average distance travelled by attendees (Round Trip) and festival capacity



Festival in rural area Festival in urban area

Overall, it's challenging to identify a clear trend in audience travel, as each festival has its own specific characteristics:

- Le Bon Air is just a few minutes' walk from a SNCF train station.
- Les Z'Eclectiques organises 4 editions a year (one in each season).
- Le festival de Thau is a longer festival than the others (16 days).
- Le festival Les Suds, in Arles, and can attract a specific audience that may be willing to travel long distances to attend. The 42 courses and masterclasses organised during the festival, which are attended by around 600 people, also justify a longer travel time for attendees, making this festival unique. Additionally, the presence of cultural tourism in the area, with festival—goers also attending the photography festivals in Avignon and Aix during the same period, further explains this difference compared to other festivals.

All these activities make the emissions from audiences and artists difficult to compare across festivals.

Festival de la Paille and Les Nuits Secrètes are the most similar in terms of activities, both being rural festivals with only one edition per year and lasting less than four days. There is a slight tendency for the average distance travelled by visitors to increase as the size of the festival grows. The Hadra Trance Festival illustrates this trend, as the distances travelled increased between the 2021 and 2022 editions, despite an increase in festival capacity.

To validate these trends and obtain more detailed analyses, it is essential to compare these results with the Bilan Carbone[®] (carbon footprint assessment) of other venues.

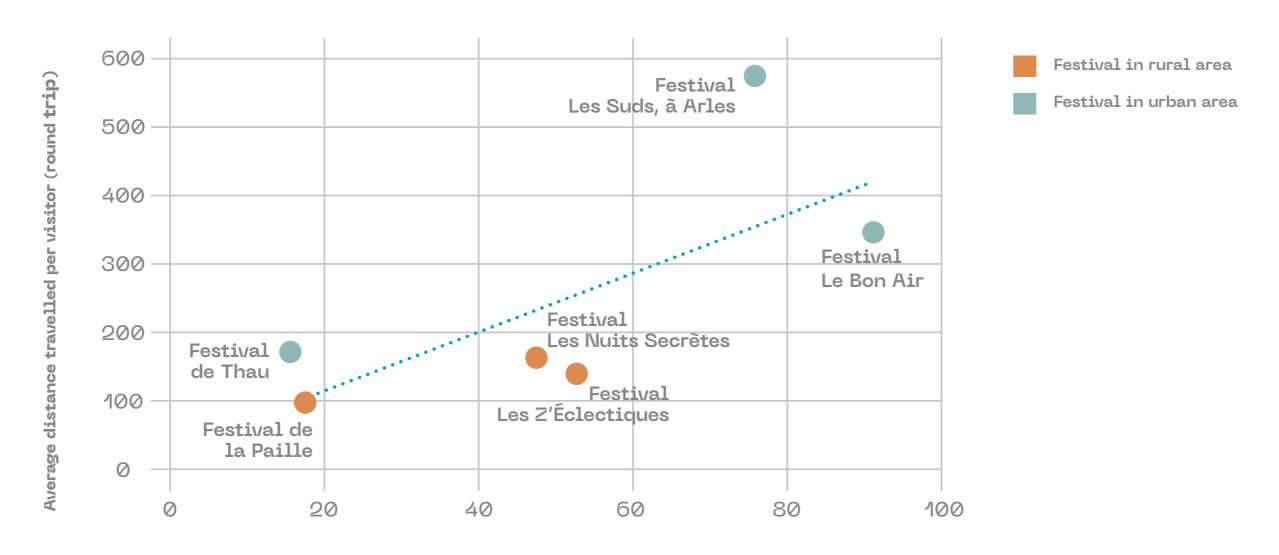
Focus on audience trav

Focus on audience travel (58%)

There is a correlation between the number of artists programmed and the average distance travelled by audiences. The more artists a festival presents, the further audiences are likely to travel.

However, these results should be interpreted with caution, as the distances travelled by audiences also depend on factors such as the reputation of the artists, their presence in a given area, the type of programming, and the musical aesthetic promoted by the festivals.

Study of the correlation between the number of artists in the lineup and the average distance travelled per visitor (round trip)



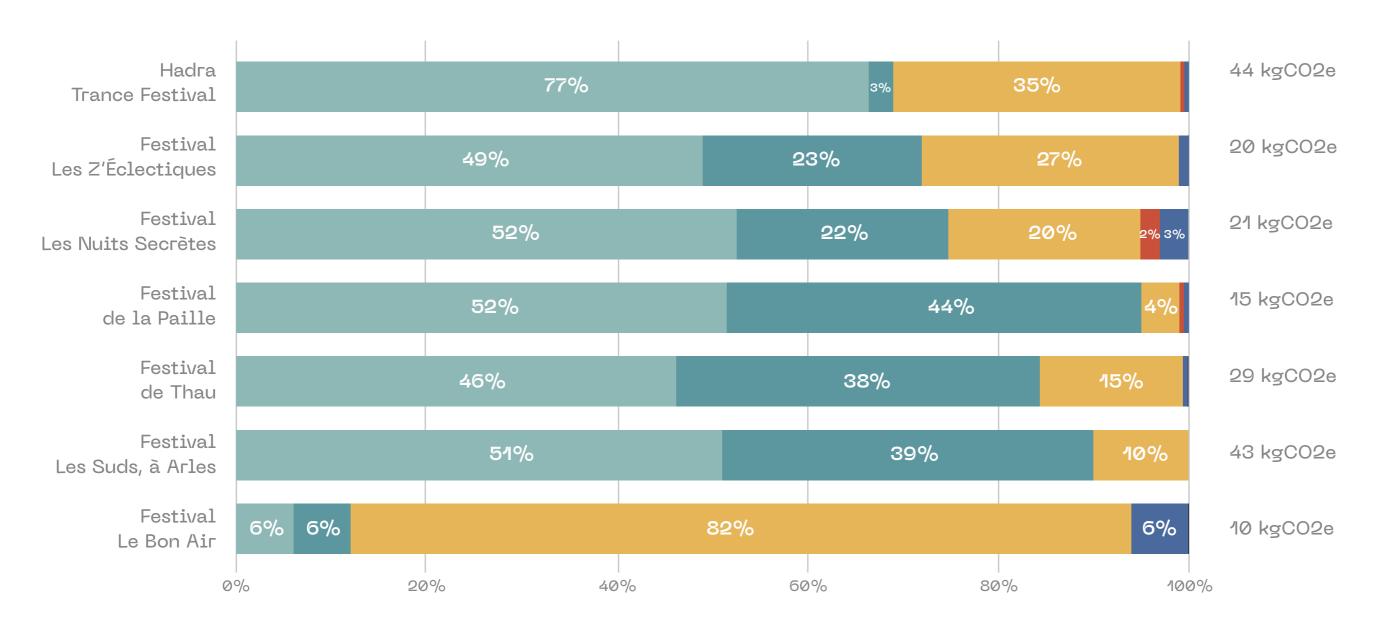
Number of artists on the line-up

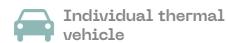
Festivals Focus on audience travel (58%)

On average, the preferred means of transport remains the individual thermal vehicle for rural festivals while urban festivals see a mix of public transport and individual combustion vehicles.

Additionally, **Le Bon Air festival**, which has the lowest GHG emissions per visitor (20 kgCO2e overall and 10 kgCO2e for audience travel alone), stands out for the **significant use of public transport by its attendees**. Overall, as the use of public transport increases, the emissions linked to audience travel decrease.»

Modal split of visitors by festival (in % of km)











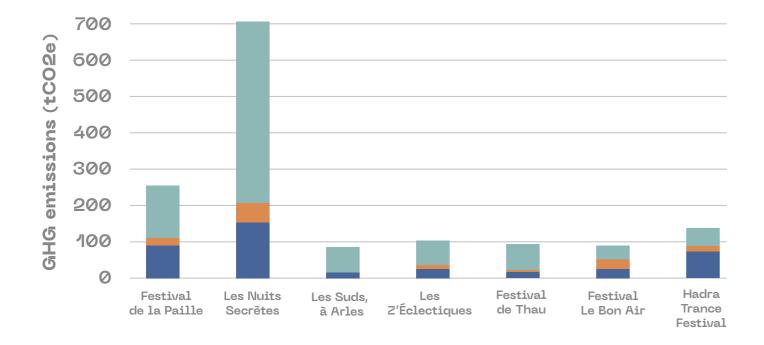


Festivals Focus on inputs / purchases (25%)

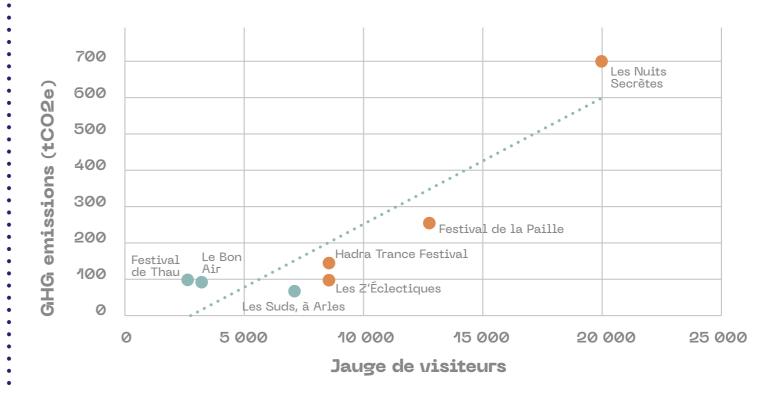
Similar to concert venues, we observe that as the number of festivalgoers increases, so do the emissions from purchases and inputs for activities.

Purchases of services, particularly the hire of stage equipment and infrastructure, along with catering and bar products, generally represent the two largest categories of expenditure. It is important to note that the use of services is not differentiated between office operations and festival activities.

Detailed emissions of inputs linked to festival activities (tCO2e)



Emissions of activity-related inputs by visitor capacity (tCO2e)



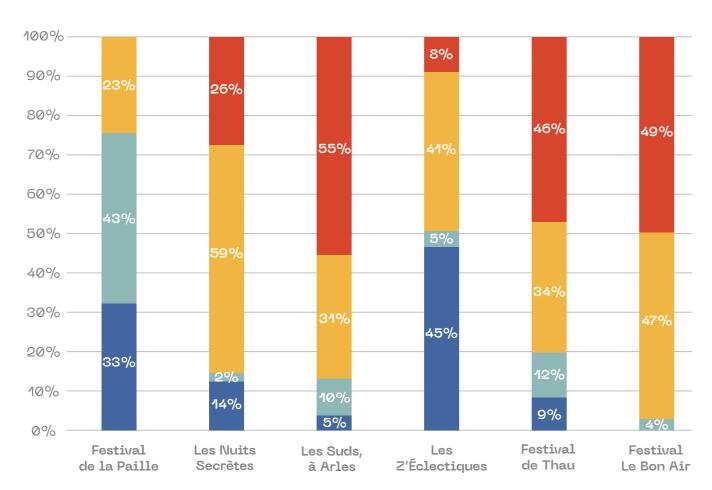






Festivals Focus on artist travel (4%)

Breakdown of artists' modes of transport (as a percentage of kms travelled)







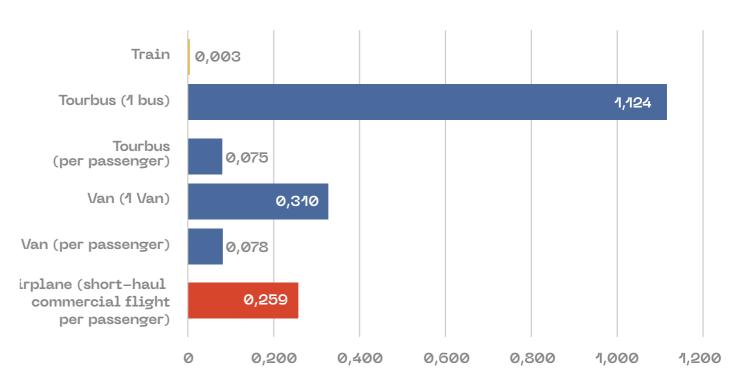




We observe that the geographical location of festivals can influence the preferred mode of transport for artists, as air travel remains significant for the majority of festivals in urban areas (49% for Le Bon Air, 55% for Les Suds à Arles, and 46% for the Festival de Thau). Conversely, for rural festivals such as Les Nuits Secrètes, Les Z'Eclectiques, and the Festival de la Paille, the use of air travel by artists is lower.

However, these observations should be qualified. For instance, the case of the Festival des Suds in Arles demonstrates that it is not just the geographical location of the festival that matters, but also the geographical origin of the artists they programme. Indeed, most of the artists scheduled to perform travel by plane, as they reside outside Europe and typically include at least one flight in their tour. In contrast, the Festival de la Paille predominantly features national (French) and regional artists.

Emission factors by mode of transport



kgCO2e/km ou kgCO2e/pass.km

Analysis
by type of
structure

3.4 Touring agencies

Touring agencies Average carbon footprint

Methodological Note:

Touring agencies are not directly responsible for concert-related emissions (specifically audience travel), but they are dependent on them. This is why they are included in their Bilan Carbone, just as concert venues account for artist travel in their assessments. The touring agencies in the Déclic panel emitted an average of 1,646 tCO2e.

The vast majority of their emissions arise from concert-related activities, with audience travel estimated to

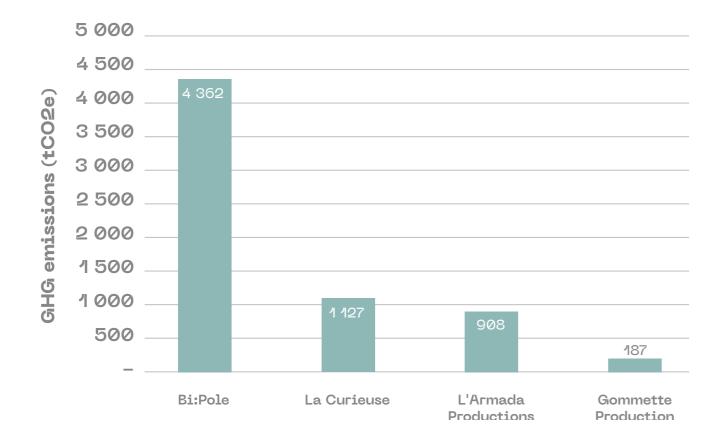
The touring agencies in the Déclic panel emitted an average of 1,646 tCO2e. The vast majority of their emissions are attributed to concert-related activities, primarily estimated here by audience travel (82%). Purchases represent the second largest source of emissions for touring agencies, encompassing staff catering as well as the procurement of supplies, scenography, and services (such as communication and artist accommodation). Emissions from artists' travel also account for a significant portion of their overall emissions, excluding those related to audience travel.

It is challenging to compare the four organisations on the panel, as each has its own specific activities.

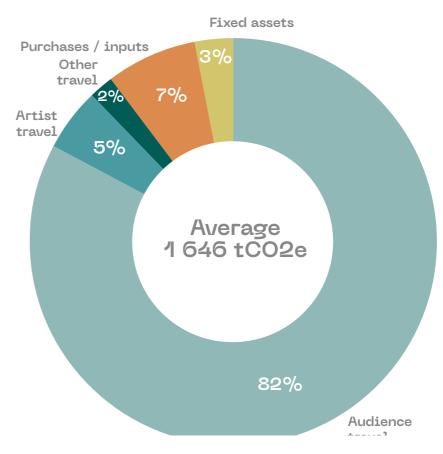
account for 82%. Purchases represent the second-largest source of emissions for touring agencies, including staff catering and purchases of supplies, scenography, and services (such as communication and artist accommodation). Emissions from artists' travel also constitute one of their main sources of emissions, excluding audience travel.

It is challenging to compare the four organisations on the panel, as each has its own specific activities. Therefore, it is reasonable to find similar emissions among structures at different points in the music value chain. Efforts have been made to avoid double counting when estimating (by extrapolation) the sector's impact.

Overview of emissions of touring agencies in tCO2e



Breakdown of GHG emissions emissions for a booking agency



This distribution by category represents an average of the shares attributed to each category in each Bilan Carbone®; therefore, these data should be interpreted with caution.

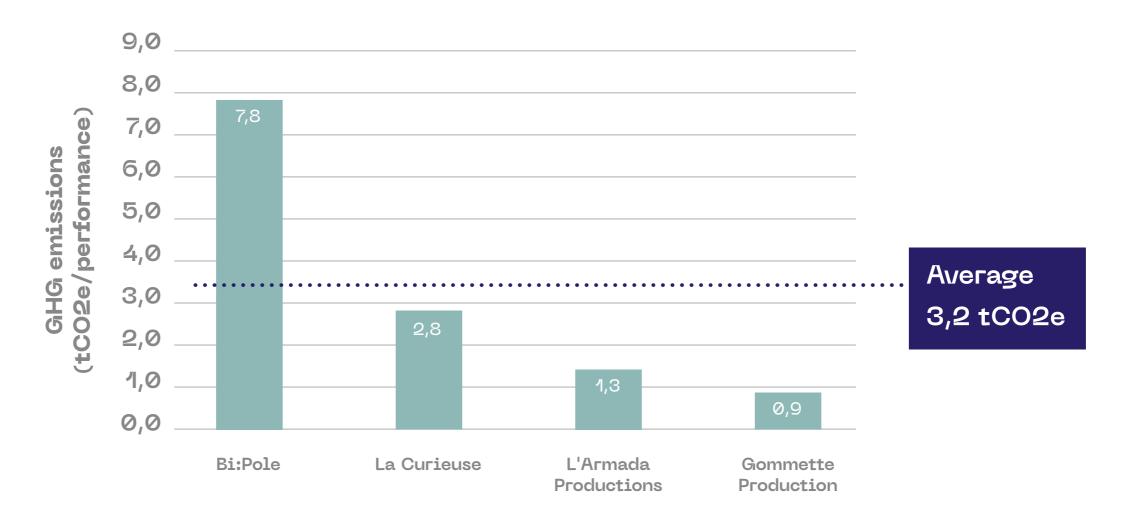
Touring agencies GHG emissions per performance

The average emissions for Bi:Pole are significantly higher than those for other touring agencies. Several factors contribute to this discrepancy: artists from different structures perform their shows in venues of varying types and capacities. The average capacity of venues is 1,823 people for Bi:Pole artists, 456 for La Curieuse artists, 246 for Gommette Production, and 208 for Armada Productions.

Previous analyses of festivals and venues indicate that audience numbers correlate with audience size. The larger the audience, the more intense the audience travel in terms of emissions.

Moreover, the activities of the four structures differ. For instance, Armada and Gommette shows promote audience carpooling, as these shows primarily target younger audiences.

Overview of Touring agencies emissions in tCO2e by concert show

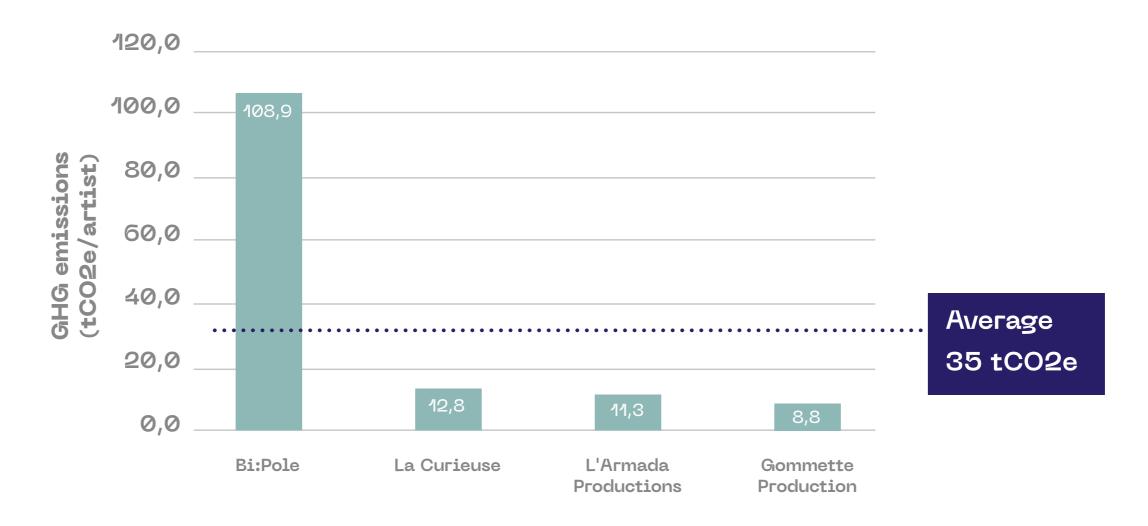


Touring agencies GHG emissions per artist

A similar trend can be observed in the average emissions generated per artist within each organisation. On average, a Bi:Pole artist travels further and attracts larger audiences than artists from other organisations.

Bi:Pole artists emit more GHGs during travel compared to those from other organisations, with emissions approximately 10 times higher on average. Bi:Pole also has significantly more international dates than the other organisations, with 27% of dates being international for Bi:Pole, compared to 11% for La Curieuse, and less than 1% for Gommette and l'Armada. These international dates contribute to the artists' travel emissions, as air travel is more commonly employed.

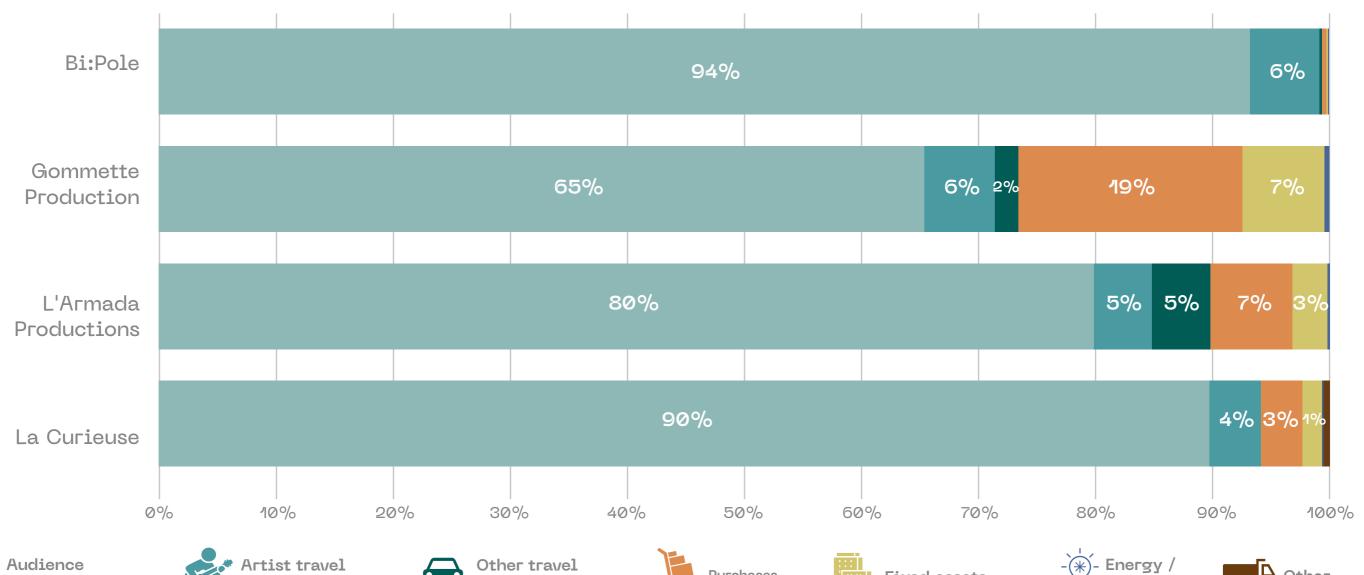
Overview of touring agencies in tCO2e emissions per artist



Touring agencies A closer look at the breakdown of GHG emissions by category

The breakdown of GHG emissions from touring agencies by category confirms that audience travel constitutes the largest category by far. Artists' travel can be regarded as the second main source of emissions, as this category encompasses emissions from various activities, including catering for employees and audiences, as well as the purchase of goods and services.

Breakdown by item by production organisation (as % of emissions)













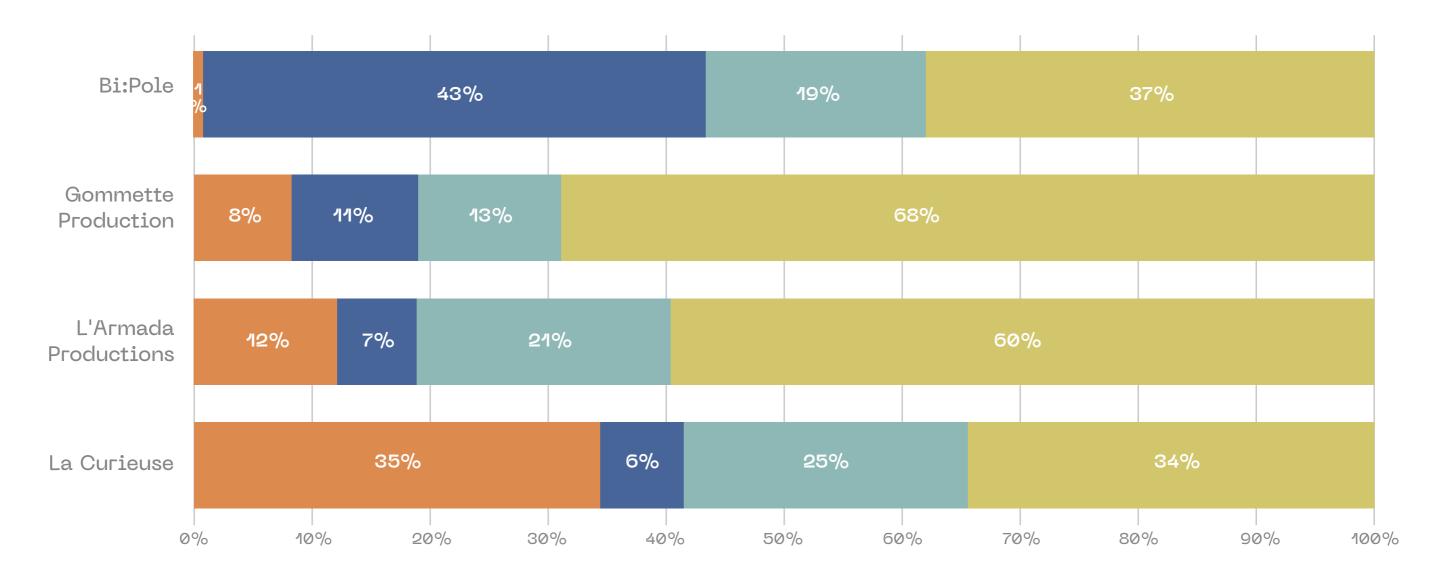




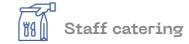
Touring agencies Focus on inputs/ purchases (7%)

The majority of emissions from the purchases made by touring agencies are attributed to the accommodation and catering of teams (artists or artistic crews) during their work. The second largest source of emissions comes from the purchase of services, such as insurance, consultancy, and fees.

The proportion of emissions from supplies varies by organisation; this emissions category particularly includes printed materials (such as posters and flyers), merchandising for the organisations, and, to a lesser extent, emissions from office supplies.









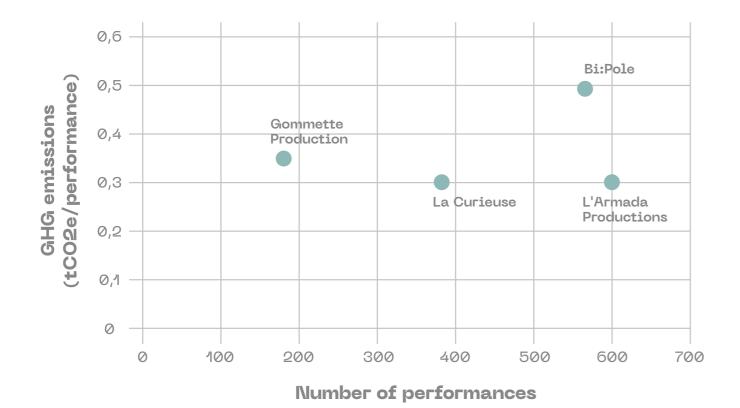


Touring agencies Comparative analysis of Greenhouse Gas Emissions

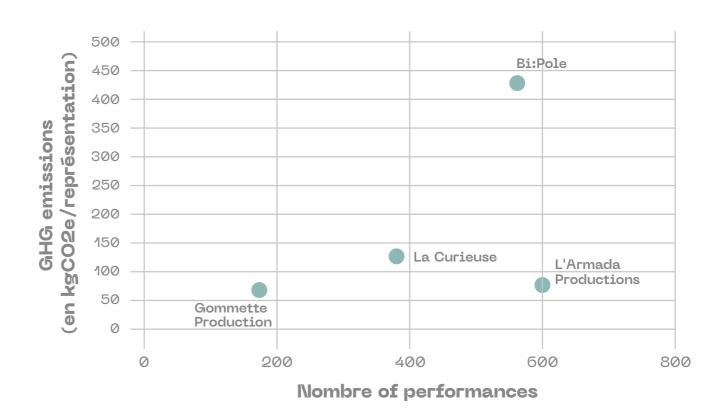
While emissions for an average performance (excluding those of the audience) are roughly equivalent for La Curieuse, L'Armada, and Gommette Production, they are higher for Bi:Pole.

This discrepancy is attributed to the average distance travelled by artists during an average performance and the modes of transport used: Bi:Pole artists rely more on air travel compared to artists from other touring agencies.

GHG emissions from touring agencies (excluding travel) according to the number of shows



GHG emissions from artist travel by number of shows

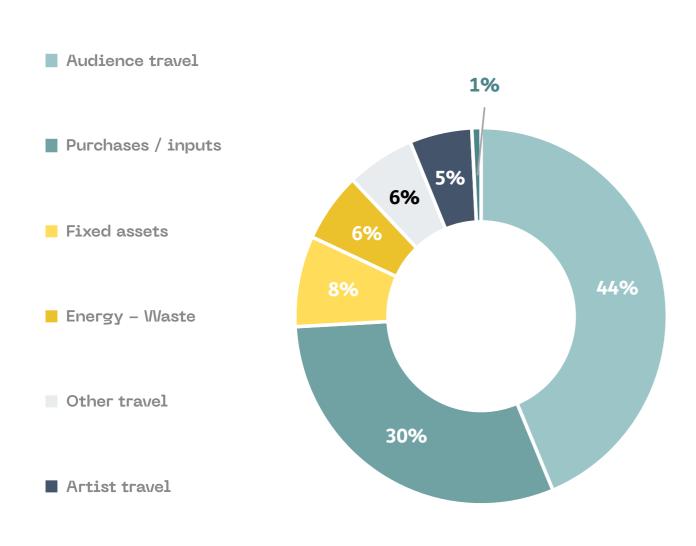


4.

A target trajectory for all members

What target should we aim for?

Since the panel of structures observed was not directly representative of all members, the extrapolation of results required differentiated weighting of the reports by structure. Double counting has been addressed (audience travel, artist travel). It is evident that audience travel is of primary importance, followed by inputs.



Other



Daily mobility for leisure accounted for 7,200 ktCO2e in France in 2019



A city like Paris emits 15 ktCO2e per day (based on 2018 data) for the mobility of its inhabitants, waste management, and the energy consumption of its buildings



160 ktCO2e is equivalent to the carbon footprint of the mobility of 60,000 French people



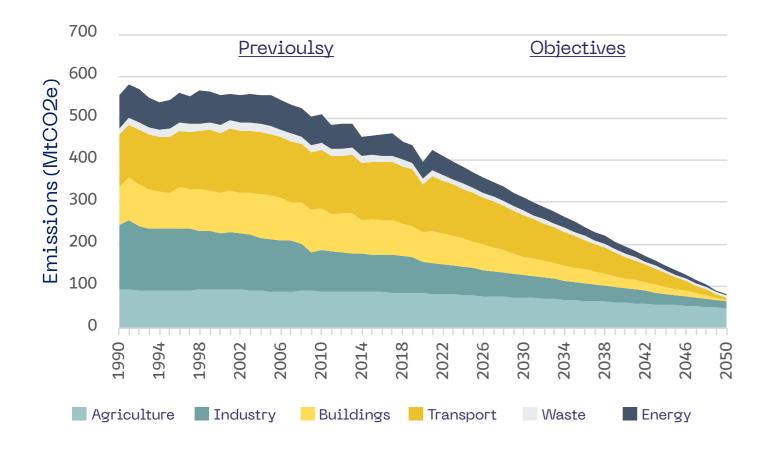
A forest covering 900 hectares would need to mature in order to absorb all these emissions

The target Meeting the expectations of the SNBC (National Low Carbon Strategy)

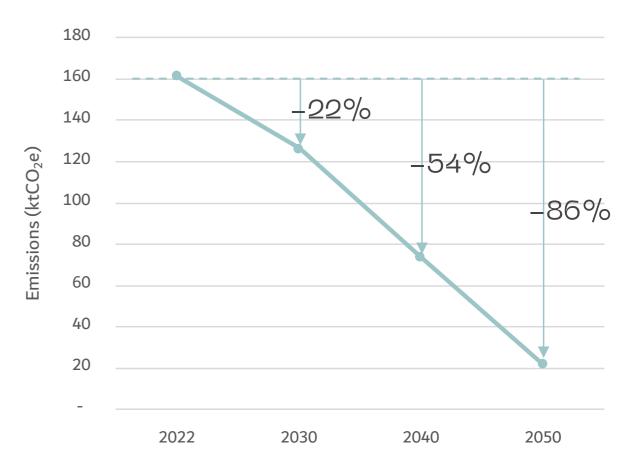
The second version of the National Low Carbon Strategy (SNBC), released in 2020, outlines targets for French territorial emissions by sector: Agriculture, Industry, Buildings, Transport, Waste, and Energy.

To align with decarbonisation efforts and meet these challenges, the live music sector (SMA + FEDELIMA) should aim for decarbonisation targets of approximately 22% by 2030 compared to 2022 levels, 54% by 2040, and 86% by 2050.

SNBC – Historical territorial emissions and annualised territorial emissions targets for France



Tailored and relevant trajectory for all SMA and FEDELIMA members.



Note:

The SNBC 3 - expected to be more ambitious - was scheduled for release in 2023 but has been postponed to 2024.

Calculation method:

Definition of a reference trajectory by sector for each emission item in the complete carbon footprint, and calculation of carbon budgets per item using a contraction method.

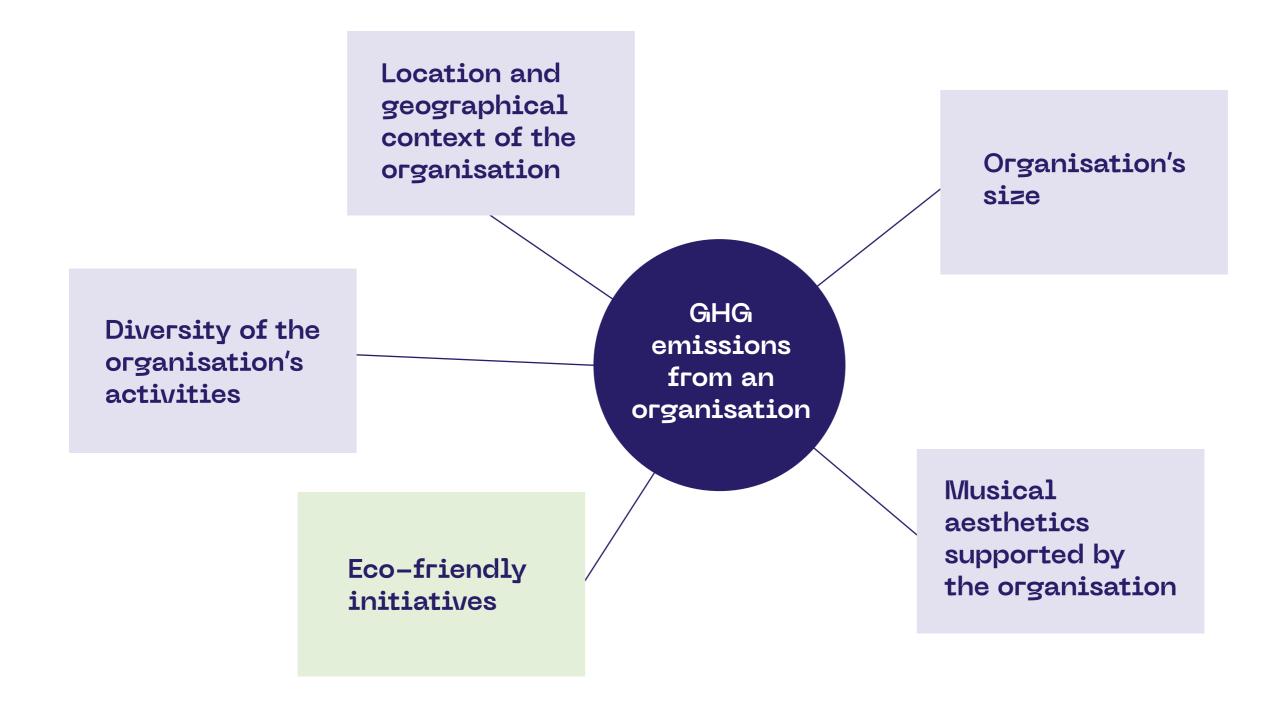
5. Conclusion

Conclusion The main factors of influence

As a cultural venue expands (in terms of the number of performances, artistic projects hosted, capacity, etc.), its carbon footprint typically increases.

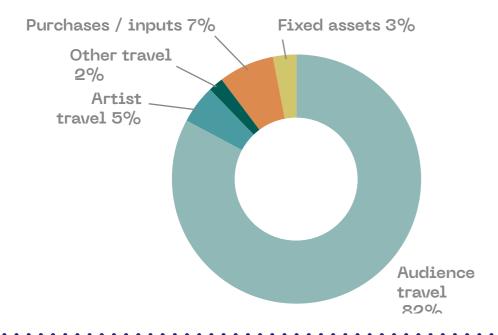
The geographical context of a venue or festival significantly influences the emissions associated with audience and artist travel.

The diversity of activities and the uniqueness of the musical programme can greatly affect the venue's appeal, consequently influencing the distance audiences are willing to travel. An unconventional musical aesthetic can draw audiences from further afield.

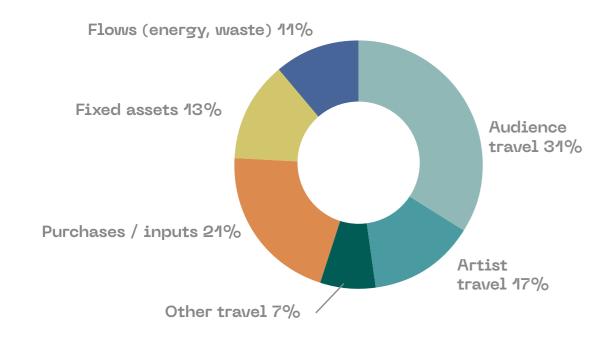


Conclusion Some key figures

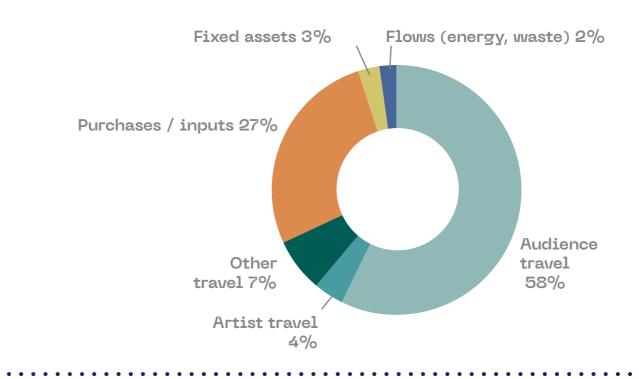
Breakdown of GHG emissions for an average touring agency



Breakdown of GHG emissions for an avergage concert venue



Breakdown of GHG emissions for an average festival



Breakdown of GHG emissions for an average training centre (the CEM)

