CARBON FOOTPRINT 2022

EIBENS

Green Globe

Sostenibilidad y Proyectos Ambientales

CONTENTS

TABLES

FIGURES

EXECUTIVE SUMMARY

This report presents the calculation of the carbon footprint for scopes 1, 2 & 3 for the year 2022, as well as a reduction plan to mitigate the impact of EIBENS in the future.

The UNE-ISO 14064-1 standard is the methodology followed for the calculations.

The approach used to report EIBENS' GHG emissions is operational control, thus, 100% of the emissions are accounted.

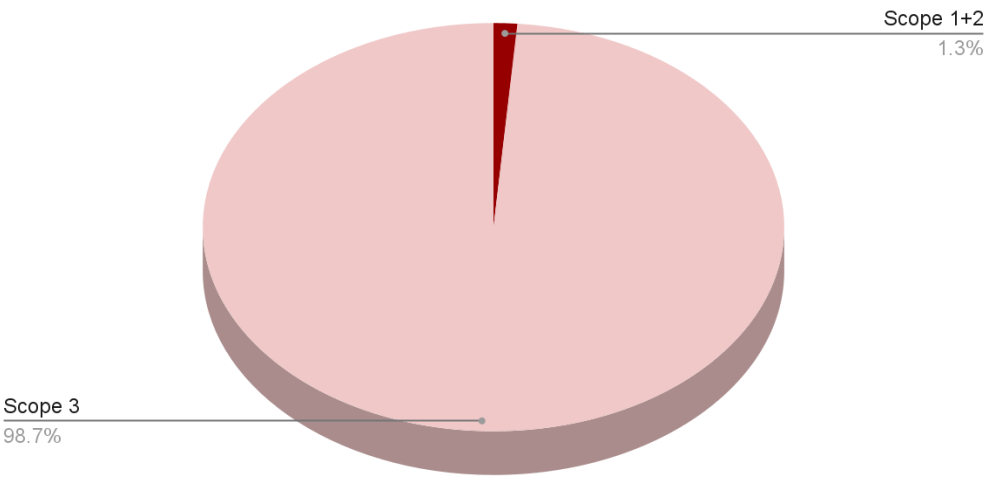
CARBON FOOTPRINT 2022

The result of the Carbon Footprint calculation for scopes 1, 2 & 3 is **493.23 t CO_2 eq in 2022**. Breaking down the emission sources considered in each scope the results are as follows (table 1 ES and figure 1 ES):

Table 1 ES. Emissions by scope.

Scope	Source	Emissions (t CO_2 eq)
Scope 1	Fossil fuel consumption from stationary sources	6.48
Scope 2	Electricity consumption	0.08
Scope 3	Indirect emissions from different activities	486.67
	Total emissions	**493.23**

Figure 1 ES. Emissions by scope.



SCOPE 1

Emissions resulting from sources considered in scope 1 are **6.48 t CO_2 eq, 1.31% of total emissions** for year 2022. These emissions are generated by natural gas consumption for heating the coworking space hired by the company in China.

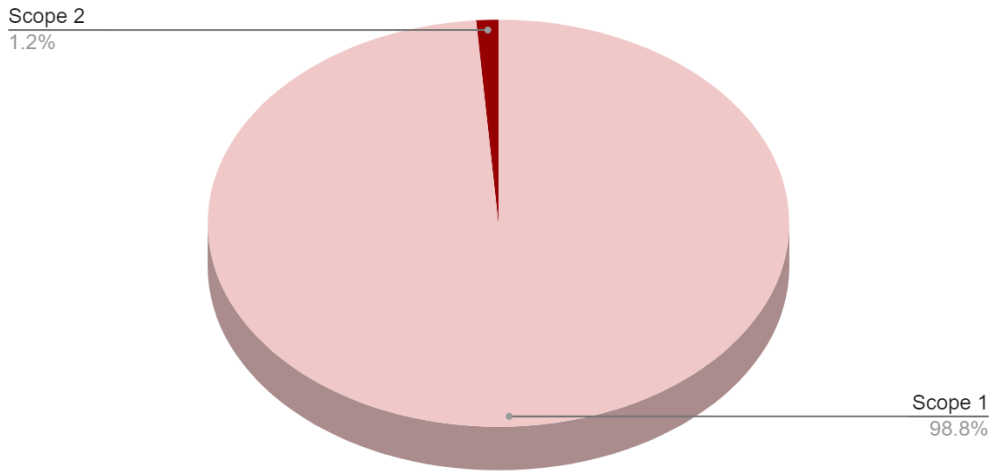
SCOPE 2

Emissions generated by electricity consumption in the premises where EIBENS performs its activity is **0.08 t CO_2 eq, 0.02% of total emissions** for year 2022.

SCOPES 1+2

Analysing the two scopes as a whole (figure 2 ES),it is clear that natural gas consumption for heating is the largest contributor to the emissions (98.8%).

Figure 2 ES. Percentage of emissions of scopes 1+2.



SCOPE 3

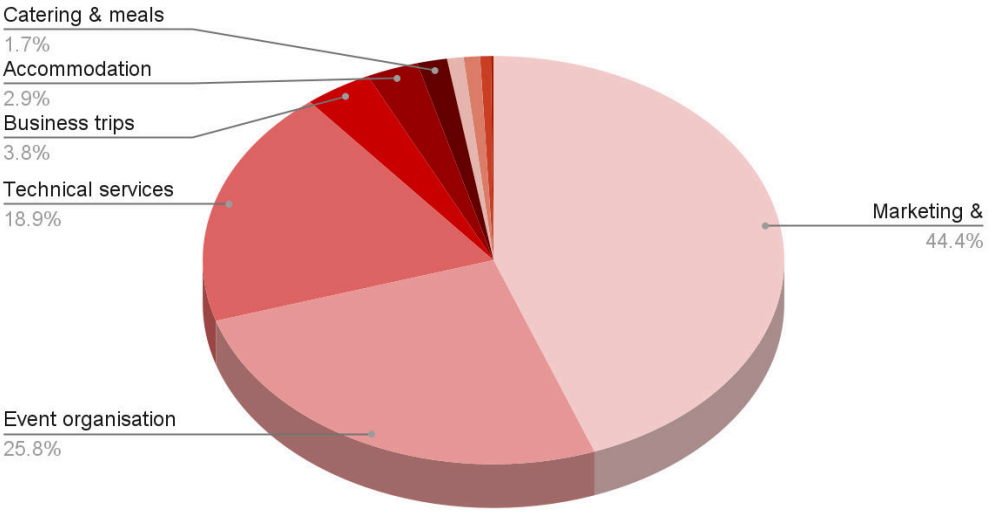
These emissions are a consequence of the organisation activity, but occur at sources that are not directly owned or controlled by the organisation. The total amount of CO2 produced by activities included in scope 3 are **486.67 t CO2 eq, 98.67% of total emissions**.

Table 2 ES list the activities and their emissions considered within scope 3, and Figure 3 ES shows the contribution of each activity to the scope 3 emissions:

Table 2 ES. Activities and emissions of scope 3.

Activity	Emissions (t CO_2 eq)	Contribution to scope 3 (%)
Marketing & advertising	215.83	44.36%
Event organisation	125.72	25.83%
Technical services	92.15	18.93%
Business trips	18.30	3.76%
Accommodation	14.03	2.88%
Catering & meals	8.12	1.67%
Commuting	4.47	0.92%
Working from home (WFH)	4.41	0.91%
Office supplies	2.92	0.60%
Training	0.68	0.14%
Total	**486.67**	**100%**

Figure 3 ES. Scope 3 activities emission contribution



PROJECT DISTRIBUTION

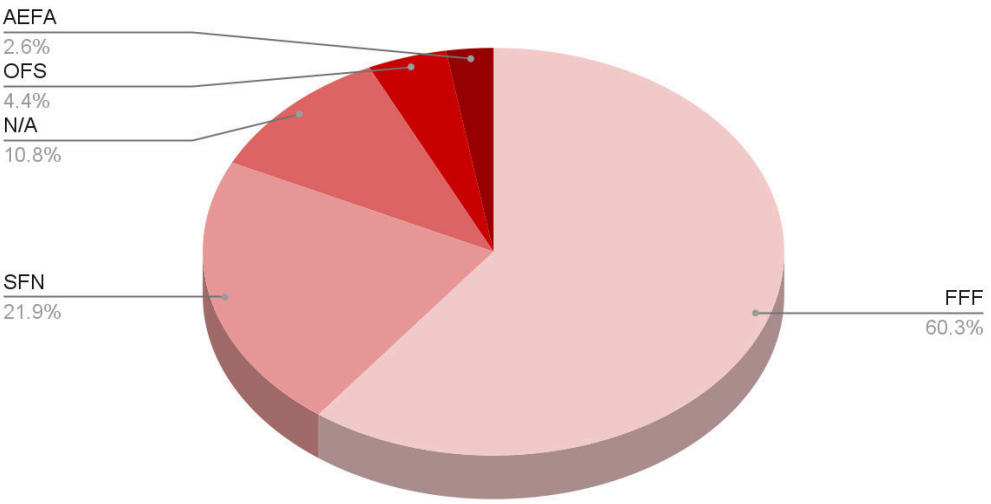
EIBENS performs its business activities by means of projects, therefore, emissions are assigned to these projects. However there are background emissions that are common to every project, such as HHRR, administrative tasks or office supplies.

Table 3 ES and figure 4 ES show a description of each project and its emissions:

Table 3 ES. Project description and emissions.

Project	Description	Emissions (t CO_2 eq)
FFF	Pork	297.27
SFN	Spain Food Nation	108.17
N/A	Not Assigned. Common emissions	53.10
OFS	Olives From Spain	21.76
AEFA	Alfalfa	12.93
	Total	**493.23**

Figure 4 ES. Project contribution to total emissions



EMISSION INTENSITY

The total carbon footprint calculated needs to be weighted considering the activity of EIBENS. With total emissions given for 2022 in t CO_2 eq, emission intensity can then be calculated by dividing emissions by revenues and by number of employees, as table 2 ES shows.

Table 4 ES. Emission intensity per activity.

Parameter	2022
Emission intensity per revenue (t CO_2 eq / M€)	135.07
Emission intensity per number of employees (t CO_2 eq / employee)	17.62

REDUCTION PLAN

Table 5 ES shows the emission reduction potential for each measure proposed in this report.

Table 5 ES. Measures and reduction potential for year 2022.

Measure	Emissions Reduction (t CO_2 eq)	Reduction percentage
3.1. Airline tickets purchase based on the GHG emissions caused	2.64	0.53%
3.2. Substitution of flight trips by train	1.05	0.21%
3.3. Choice of accommodations that offset their emissions	9.82	1.99%
3.4. Substitution of fuel for electric vehicles for daily commuting	0.47	0.10%
Total	**13.98**	**2.83%**

As part of the reduction plan, traceability of information for calculation is proposed as a core measure for the performance of calculations in the future. Adequate identification and quantification of activities, especially within scope 3, is key for future calculations.

eIBeNS

Carbon Footprint 2022

1. INTRODUCTION

Climate Change is one of the most significant challenges that today's society faces. Following the United Nations Intergovernmental Panel on Climate Change (IPCC), it is defined as a variation in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period. It is a consequence of GreenHouses Gasses (GHG) emissions, mainly produced by human activities.

Climate change constitutes a global challenge, therefore it requires actions at international level, which must be firm to ensure a transition. Thus, the need to adopt plans to address this challenge is now a reality that no one disputes and that must be extended to all areas of society. Various governmental bodies are taking measures to promote actions to reduce emissions and to move towards a low-carbon, climate-resilient development model.

An example of this is the **2030 Agenda for Sustainable Development**, approved by the United Nations General Assembly in 2015, which has become one of the most ambitious proposals of this body on the promotion of sustainability. It establishes a goal that affects climate action and energy transition: *goal 13: 'Climate action'*, which urges governments, institutions, companies and citizens to apply measures to reduce emissions and to adapt to and mitigate the effects of climate change.

Similarly, the Green Deal, an agreement between European Union countries, aims to reduce greenhouse gas (GHG) emissions to 55% of pre-industrial levels (1991) by 2030 and to achieve climate neutrality by 2050.

Considering this, Eibens Consulting, S.L., hereafter cited as **EIBENS**, places the commitment to the environmental sustainability of our planet at the core of its policy. Fostering a new strategy for the transition and adaptation to a working model committed to protecting the environment. To this end, the aim of this project is to calculate the greenhouse gas emissions, hereafter named as GHG, produced directly and indirectly by the company's activity over the course of the year 2022, as well as to look for reduction alternatives and possibilities for offsetting them.

1.1. What is an organisation's footprint?

The **Carbon Footprint** identifies the amount of GHG emissions that are released into the atmosphere as a result of the development of any activity, allows to know all the sources of GHG emissions and establish from this knowledge, effective reduction measures.

The **Carbon Footprint** of an organisation is the amount of direct and indirect GHG emissions associated with the operations of the organisation. Direct and indirect emissions are defined as follows:

- **Direct:** are GHG emissions produced by or controlled by the organisation itself. They could be defined as emissions that occur at the place where the activity takes place. Examples are the emissions produced by the heating system, if it is based on burning fossil fuels.

- **Indirect:** are GHG emissions generated as a result of the organisation's activity from sources owned or controlled by another organisation. The most relevant ones often come from electricity consumption, which produces the emissions at the place where the energy was generated.

The carbon footprint is estimated in tonnes of CO_2 equivalent (t CO_2 eq), although there are more gases that contribute to the greenhouse effect, such as sulphur hexafluoride (SF_6), methane (CH_4) or nitrous oxide (N_2O). When an organisation's carbon footprint calculation is performed, 'Scopes' are used to group the GHG emitting sources. As a result, direct and indirect GHG emissions are classified into 3 different scopes, as listed below:

- **Scope 1:** direct emissions. Those that a company causes by operating equipment that it owns or controls. These can be a result of running machinery to make products, driving vehicles, or heating buildings and refrigeration systems.
- **Scope 2:** indirect emissions. Those created by the production of the energy that an organisation consumes. Installing solar panels or sourcing renewable energy rather than using electricity generated from burning fossil fuels would cut a company's Scope 2 emissions.
- **Scope 3:** These are also indirect emissions, meaning those not produced by the company itself, but they differ from Scope 2 as they cover those produced by customers using the company's products or those produced by suppliers making products that the company uses. This scope is the hardest to calculate, due to the wide range of products and services involved.

1.2. Carbon Footprint Opportunities

The calculation of the carbon footprint of EIBENS embodies a double opportunity. On the one hand, it is a tool for the organisation to reduce the costs involved in its activity and, on the other, it contributes to the reduction and/or compensation of GHG emissions, which implies a greater environmental awareness. Other advantages for the organisation, in addition to contributing to the fight against climate change, are the following:

1. **Identifying** GHG emissions reduction opportunities.
2. **Reducing** the company's costs, as a consequence of the reduction of energy consumption.
3. **Improving** energy efficiency of the equipment.
4. **Raising** awareness about the fight against climate change.
5. **Making** use of new technologies and more efficient systems in the consumption of resources.
6. **Promoting** the use of renewable energies.
7. **Enhancing** the reputation of the company.
8. **Increasing** company's competitiveness by a sound position in the fight against climate change.

2. THE ORGANISATION: EIBENS

EIBENS is a consulting firm specialised in the agri-food industry in China and Southeast Asia for European clients. In the beginning, its activity was focused on providing services related to market intelligence and strategy, but it has been growing and diversifying since then.

2.1. Services

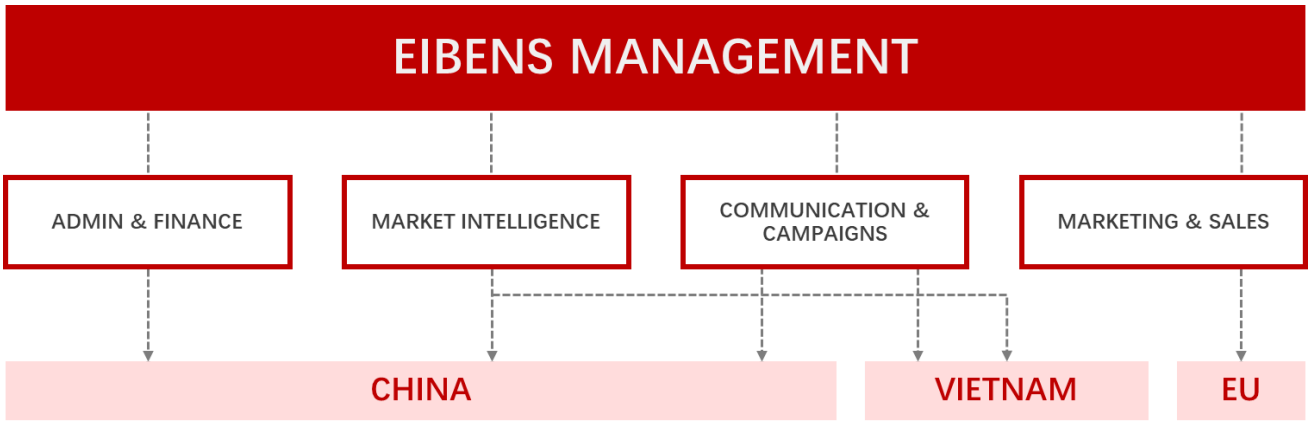
The services the organisation provides are:

- **Market Intelligence and Strategy:** transforming information received from the market into actionable points for clients. This includes market research, news and legislation updates, store checks, among many other things that provide the necessary information for decision-making.
- **Communication and Promotional Campaigns:** developing campaigns for European agri-food products to be positioned in Asian markets, including importers, distributors, retailers, online platforms and foodservice chains.
- **Supporting Services:** including a wide range of services depending on the needs of the client, such as exhibitions and due diligence.

2.2. Structure

EIBENS is a consulting company that operates in a decentralised way in several specific locations around the world. In a simple way the organisation chart is illustrated as follows:

Figure 1. EIBENS's structure.



The company is headquartered in Madrid, Spain. However, they hire a coworking space in Beijing, China and in Ho Chi Minh City (HCMC), Vietnam. Additionally, they do not own any other facility or vehicles. In spite of this, EIBENS has employees in other locations working on a Working From Home (WFH) basis.

2.3. Purpose of EIBENS

The quantification of the carbon footprint is carried out in order to identify in which parts of the services provided are the most important sources of emissions, analyse them and quantify the emissions they generate. In addition, it provides key information to be able to perform consumption and emission reduction strategies and long-term evaluation plans.

The activity of EIBENS involves the organisation of events, trips, conferences, analyses and research to promote European agri-food products in Asian markets. As professionals, they seek continuous improvement of their procedures for the development of an increasingly sustainable and versatile working model.

In this context, **EIBENS places among its pillars the commitment to environmental sustainability**. It is committed to a new strategy that facilitates the transition and adaptation towards a low-carbon organisation that is resilient to climate change. To this end, the aim of this project is to determine the greenhouse gas emissions, hereinafter GHG, produced directly and indirectly by the company's activity over the course of the established period, as well as to look for reduction alternatives and possibilities to compensate for them.

Based on the analyses performed in this report, the company will be able to set its emission reduction targets and identify the risks and opportunities associated with climate change and its potential impacts on its strategic objectives. The Carbon Footprint Calculation, a strategic tool in the fight against Climate Change, is used for this purpose. This calculation is carried out following the methodology established in the *UNE EN ISO 14064-1 standard 'Greenhouse gases - Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals'*.

3. REPORT OBJECTIVE

The objective of the present report is to **quantify the GHG emissions produced by the activity of EIBENS during the year 2022**, both directly and indirectly, as well as to look for reduction and compensation alternatives.

4. GHG INVENTORY DESCRIPTION

This section includes, in accordance with the *UNE-ISO 14064-1* standard, the description of the reporting organisation, the persons responsible, the intended users, dissemination policy, the definition of the base year and the exclusions that have been made for the GHG inventory.

4.1. Reporting organisation

This report has been prepared by Green Globe Sustainability and Environmental Projects, a consultancy firm in charge of providing advice on GHG emissions inventory, monitoring and emission reductions. Table 1 details the team responsible for the elaboration of this report:

Table 1. Personnel involved in the report.

Duties	Personnel	Organisation	Position
Data collection	José Mallén	EIBENS	Project Manager
Carbon footprint calculation and advisory	Javier Pedraza	Green Globe S&EP	CEO
	Luis Felipe González	Green Globe S&EP	Consultant

4.2. Dissemination policy and intended users

The information disclosure policy of EIBENS is governed by transparency and aims to make information relating to the organisation's programmes and activities publicly available, provided that there is no compelling reason to keep it confidential.

EIBENS is committed to disclosing its GHG inventory information. As a consequence, it considers that public access to information is a key component for the effective participation of all stakeholders, and there is a positive correlation between a high level of transparency and public participation in the activities it supports and develops.

This report is therefore addressed to all stakeholders of EIBENS.

4.3. Reporting period and frequency of reporting

The carbon footprint has been calculated for the calendar year 2022. The report is published on an annual basis and contains the analysis of the carbon footprint of EIBENS together with a GHG emission reduction plan.

4.4. Base year

In order to be able to report GHG emissions, to show a trend and assess the variation of EIBENS emissions, a base year is set.

2022 has been chosen as the base year because sufficient information on GHG emissions is available and because it is the first time that the carbon footprint has been quantified. This year will be the starting point and comparison with the next years, serving as a support to achieve the GHG emissions reduction target.

Nonetheless, if the organisation grows constantly, either through structural changes (new departments, areas, investments, etc.); methodological changes (improvement in the accuracy of data collection, new certifications, etc.) or the introduction of new emission sources (new acquisitions, opening of offices in foreign countries, etc.), the need arises to establish a new year as a base year and perform the relevant recalculations. The criteria established for the recalculation of the base year are:

- **Doubling the number of employees:** It is considered that if the number of employees of EIBENS were to double, the emissions generated by their daily commuting, energy consumption and number of trips would increase considerably and therefore a new base year comparable to the new size of the organisation would have to be established.
- **Increase of the annual budget of the Action Plan by 50%:** Similarly, an increase in the budget means an increase in expenditure and, consequently, an increase in emissions generated. It is considered that this increase would necessitate a recalculation of the base year.

4.5. Exclusions

For the purpose of calculating the emissions of this organisation, the following gases have been excluded: methane (CH_4), nitrous oxide (N_2O), nitrogen trifluoride (NF_3), sulphur hexafluoride (SF_6) and perfluorocarbons (PFCs). The reason for the exclusion is that the processes and operations occurring in the company with GHG impacts do not have a significant emission of these gases. In addition, some of the emission factors used for the different processes of the organisation do not incorporate these gases, so there would be no record of these emissions if they had been taken into account in the calculation. The main gas emitted as a result of the processes that take place in EIBENS is CO_2 therefore the accounting of emissions has focused on this gas.

4.6. Assurance and materiality

The scope, objectives, level of assurance and criteria are agreed in advance with the organisation. The agreed level of assurance and materiality threshold for the verification of GHG emissions is described below:

- **Assurance level**: limited.
- **Materiality threshold**: 5%.

5. METHODOLOGY

The calculation methodology used for the GHG emissions calculation of the organisation is *UNE EN ISO 14064-1 Greenhouse gases - part 1*, which specifies principles and requirements at the organisation level for the quantification and reporting of GHG emissions and removals.

This report follows the principles of the GHG Protocol standard, principles that are derived in part from generally accepted financial accounting and reporting. These principles have been collaborated on by experts from a wide range of technical, environmental and accounting disciplines. Therefore, the accounting and reporting of emissions produced by the company will be based on the following general principles:

- **Relevance:** ensures the GHG inventory appropriately reflects the organisation's information and that it is an objective element in the decision making.
- **Completeness:** entails a good faith effort to deliver accounting and reporting in a complete and consistent manner, covering all GHG emission sources and activities included within the inventory boundary.
- **Consistency:** uses consistent methodologies that allow meaningful comparisons of emissions over time. Clearly documents any changes in data, inventory limits, calculation methods or any other significant factors over time.
- **Accuracy:** guarantees that the accounting of GHG emissions has no systematic errors or deviations from actual values, so that uncertainty is reduced as far as practicable. Data should be credible enough to be used in decision making.
- **Transparency:** discloses emissions information clearly and justify exclusions, if any. It also maintains documentation and archives in a transparent manner, facilitating audit trails. Discloses all significant assumptions and makes appropriate references to accounting and calculation methodologies and sources of information used.

5.1. Quantification approach

The emissions quantification is delivered applying the following formula for every activity that influences GHG emissions:

Emissions = Activity Data x Emission Factor

Where:

- **Activity Data:** quantitative measure of activity that results in a GHG emission, such as amount of natural gas consumed, material produced, etc.
- **Emission Factor:** amount of GHGs emitted per unit of the parameter "activity data". These factors change depending on the activity under study. For the above example of natural gas consumption the emission factor would be 0.182 kg CO2 eq/kWh natural gas.

According to international standards, the unit used to display the carbon footprint quantification is the tonne of CO2 equivalent (t CO_2 eq), which indicates the global warming potential (GWP) of each GHG, expressed in terms of the GWP of a unit of CO_2. This indicator is used to measure the impact on climate change of the release of different greenhouse gases through the same unit.

6. INVENTORY BOUNDARIES

The first step in calculating EIBEN's carbon footprint is to set the boundaries of the measurement, i.e. to define which areas of the company will be included in the data collection and calculations.

6.1. Period covered

This report covers the period starting **from the 1st of January to the 31st of December, 2022**, which will be set as the base year for the calculation of the carbon footprint of the coming years.

6.2. Organisational boundaries

A company's operations vary in both their legal and organisational structure, including wholly owned operations, franchises, joint ventures and other forms. By setting organisational boundaries, the company selects an approach to consolidate its GHG emissions. These boundaries are defined by the control exerted by the company and can be set by the following approaches:

- **Equity share:** this approach considers the economic interests, in other words, the percentage of ownership, accounting for emissions according to the company's equity share in the operation.
- **Control:** accounts for every emission from operations under control of the company. There are 2 types of control:
    - Financial control: accounting for emissions from each operation under financial control.
    - Operational control: accounting for emissions under operational control.

The approach used to report EIBEN's GHG emissions is operational control, as the company owns its processes and is responsible for its operations. It is also the best way to measure efficiency and improve processes. This approach will account for 100% of the GHG emissions attributable to the operations over which the organisation has operational control.

6.3. Reporting boundaries

Reporting boundaries are defined by identifying the emissions associated with the company's operations and classifying them as direct or indirect emissions, as well as GHG removals:

- **Direct GHG emissions:** those produced in sources owned or controlled by the organisation.
- **Indirect GHG emissions:** those that are a consequence of the organisation's activities, but occur from sources controlled or owned by a third party.

Following *UNE EN ISO 14064-1* standard, GHG emissions should be aggregated into the following categories at the organisation level:

a) *Direct GHG emissions and removals;*

b) *Indirect GHG emissions from imported energy;*

c) *Indirect GHG emissions from transportation;*

d) *Indirect GHG emissions from products used by organisation;*

e) *Indirect GHG emissions associated with the use of products from the organisation;*

f) *Indirect GHG emissions from other sources.*

To help delineate the sources of direct and indirect emissions, improve transparency, and to be useful for different types of organisations and different types of climate change policies and business goals, three "scopes" are defined for GHG reporting and accounting purposes (scope 1, scope 2 and scope 3) that encompass the above categories.

Scopes 1 and 2 are carefully defined in this standard to ensure that two or more companies do not account for emissions in the same scope. This makes it possible to use the scopes in GHG programmes where double counting is an issue. Each of these scopes is defined below:

Scope 1

Direct emissions from sources defined at organisational boundaries. These sources can be stationary (e.g. emissions from combustion of boilers, generators, air conditioning systems, etc.) or mobile (e.g. vehicles and machinery).

This scope covers category *a) direct GHG emissions and removals*.

Scope 2

Scope 2 accounts for emissions from the generation of electricity purchased and consumed by the company. These emissions actually occur at the very plant where the electricity is generated.

This scope includes category *b) indirect GHG emissions from imported energy.*

Scope 3

Scope 3 emissions are a result of the organisation activity, but occur at sources that are not owned or controlled by the organisation. Examples of scope 3 activities include the extraction or production of purchased goods, purchased fuel transportation, and the consumption of products and services.

This scope includes the following categories:

c) Indirect GHG emissions from transportation;

d) Indirect GHG emissions from products used by organisation;

e) Indirect GHG emissions associated with the use of products from the organisation;

f) Indirect GHG emissions from other sources.

In order to verify the carbon footprint, initially, the regulation considered the calculation of direct and indirect emissions corresponding to scopes 1 and 2 as mandatory. The calculation of indirect emissions of scope 3 entails a further step and was considered to be voluntary and optional. However, increasing awareness and social pressure to care for the environment, binding national and international agreements on climate change as well as technological progress have made this scope increasingly necessary and have therefore led to an update of the standard to include scope 3 in the verification process.

In this report, direct emissions have been accounted for in scope 1 while indirect emissions have been accounted for in scope 2 and scope 3. The possible emission sources included in each scope are detailed as follows in tables 2, 3 and 4:

Table 2. Possible sources of GHG encompassed by scope 1.

Scope 1	
a) direct GHG emissions and removals	Stationary combustion of fossil fuels for thermal needs and equipment such as boilers or furnaces
	Combustion of fossil fuels in mobile sources owned or controlled by EIBENS, such as cars or vans
	Leaks from refrigeration and air-conditioning equipment operating with refrigerant gases
	CO_2 emissions from fire extinguishers

Table 3. Possible sources of GHG encompassed by scope 2.

Scope 2	
b) indirect GHG emissions from imported energy	Emissions associated with electricity consumption in the organisation facilities
	Emissions associated with electricity consumption for electric and/or hybrid vehicles (if any)

Table 4. Possible sources of GHG encompassed by scope 3.

Scope 3	
c) indirect GHG emissions from transportation	Emissions associated with the daily commute of EIBENS's employees from their homes to the workplace and vice versa
	Emissions derived from the company business trips in order to develop their activity
d) indirect GHG emissions from products used by organisation	Emissions associated with the purchase of office goods, computer equipment and furniture
	Emissions associated with the consumption of water by employees of EIBENS.
	Emissions associated with the attendance and organisation of events by employees of EIBENS
	Emissions resulting from marketing and advertising activities carried out by the company
	Emissions associated with the different training activities carried out by employees of EIBENS
	Emissions generated by the accommodation and catering activities of employees on business trips
	Emissions associated with the organisation's security, surveillance and cleaning operations
	Emissions resulting from professional services provided to EIBENS
	Emissions consequence of developing technical projects for EIBENS.
	Emissions produced by facilities maintenance works
e) indirect GHG emissions associated with the use of products from the organisation	Emissions resulting from the use of products manufactured by EIBENS
f) Indirect GHG emissions from other sources	Emissions caused by waste management

7. GHG INVENTORY QUALITY MANAGEMENT

The quality management system provides a systematic process to prevent and correct errors. Its main objective is to ensure the credibility of the company's GHG inventory. Quality management should be pivotal for any company's inventory development programme.

The inventory quality management system, as established by the *UNE EN ISO 14064-1*, is based on a number of institutional, administrative and technical procedures , which provide a framework for conceptualising and designing the inventory quality management system and structuring a plan for future improvements. These procedures are listed below:

- Ensure conformity with the principles of this document.
- Ensure consistency with the intended use of the GHG inventory.
- Provide routine and consistent checks to ensure accuracy and completeness of the GHG inventory.
- Identify and address errors and omissions.
- Document and archive relevant GHG inventory records, including information management activities and GWP.

Additionally, the organisation's procedures for the management of the GHG information shall document about:

- Identification and review of the responsibility and authority of those responsible for the GHG inventory development.
- Identification, implementation and review of appropriate training for members for the inventory development team.
- Identification and review of organisational boundaries.
- Identification and review of GHG sources and sinks.
- Selection and review of quantification approaches, including data used for quantification and GHG models that are consistent with the intended use of the GHG inventory.
- Review of the application of quantification approaches to ensure consistency across multiple installations.
- Use, maintenance and calibration of measurement equipment (if applicable).
- Development and maintenance of a robust data collection system.
- Regular accuracy checks.
- Periodic internal audits and technical reviews.

- Periodic review of opportunities to improve information management processes.

The components on which the quality management of the inventory has been based in order to comply with the points above, are:

1. **Establishment of an inventory management team**

   The team is responsible for implementing the quality management system and improving the quality of the inventory on a continuous basis. It should coordinate interactions between the various facility units and external entities, such as governments, programmes, research institutions, verifiers or consultants.

2. **Generic quality control measures**

   The aim is to apply rigorous quality controls on data handling, documentation and emission calculations throughout the inventory.

3. **Quality control by specific categories**

   Implying rigorous research of the correct application of the limits, the calculation procedures and the quality of the data used.

4. **Final reports and calculations review**

   This involves conducting technical, administrative and external reviews. Once the inventory has been completed, an internal technical review focused on scientific, technical and engineering aspects needs to be carried out. Subsequently, an internal administrative review would be necessary in order to ensure the approval of the inventory. And finally, a last review should be external.

5. **Institutionalisation of formal feedback processes**

   The results of the reviews outlined in the previous step, as well as the results of all other components of the inventory quality management system, should be fed back in order to correct errors and implement improvements.

6. **Documents delivery**

   The system should include record-keeping procedures that specify what information is to be documented for internal purposes, how that information is to be archived, and what information is to be reported to external stakeholders.

Every organisation must ensure the quality of each point above on every step of the process of inventory design. Table 5 shows the generic quality management measures:

Table 5. Generic quality management measures.

Data collection, input and management activities
Review a sample of data for transcription errors.
Identify modifications to spreadsheets that may provide additional quality checks.
Ensure that appropriate control procedures have been implemented for electronic files.
Data documentation
Check that bibliographic references to data are included in spreadsheets.
Verify that copies of cited references are kept on file.
Check that assumptions and criteria for selection of boundaries, base years, methods, activity and production data, emission factors and other parameters are adequately documented.
Verify that all changes in data or methodologies are documented.
Emission calculations and estimation verifications
Verify that emission units, parameters and conversion factors are labelled appropriately.
Verify that units are labelled correctly and are consistent throughout the calculation process.
Verify that conversion factors are correct.
Verify data processing steps in spreadsheets.
Verify that input data in spreadsheets are appropriately distinguished from calculated data.
Manually or electronically verify a representative sample of the calculations performed.
Verify calculations with quick and abbreviated manual calculations.
Verify the aggregation of data at the level of source categories, business units, transactions, etc.
Verify consistency of time series and calculations.

7.1. Quality management measures applied

Quality management for the implementation of this project has been carried out according to the following scheme:

- Green Globe SyPA, S.L. elaborates an inventory of data supplied by EIBENS.
- Green Globe SyPA, S.L. elaborates an inventory of GHG emissions of EIBENS.
- Strict compliance with the generic quality management measures previously established by Green Globe SyPA S.L. for the calculation of the Carbon Footprint and the drafting of this report.

7.1.1. Activity information

The collection of high quality data is one of the most important operations in the calculation of the Carbon Footprint. Therefore, it is essential to establish sound procedures for data collection. Some of the guidelines followed for data collection and processing are presented below:

- Development of data collection procedures that make it easier for the company to collect the information, such as specific information requirement forms for each of the activities (employee transport, fuel consumption, kilometres travelled, etc.). In this case, a form has been drawn up for EIBENS employees to collect information on employees' journeys from their homes to the workplace.
- Conversion of the information provided (fuel consumption, electricity, etc.) into the appropriate units according to the selected emission factors using the correct conversion factors.
- Comparison of information on activity levels from different reference sources with the organisation's own data, if possible. In this case, it has been compared with data obtained in other Carbon Footprint studies carried out for companies of a similar nature.
- Review that decisions on operational and organisational boundaries have been applied correctly and consistently with the collection of information on activity levels.
- Implementation of quality management measures.

With regards to the activity data, these come from various sources, which are described below:

- Accounting. Registration of invoices or delivery notes.
- Internal records. Periodic checks of consumption and operation of the installations, regulatory maintenance inspections, maintenance reports.
- Forms for receiving information specifically designed for this project. They provide information on the indirect emissions made by workers and/or suppliers who have provided services to the organisation.

7.1.2. Emission Factors

Calculations of emissions generated primarily depend on emission factors and other parameters. These factors and parameters may be public and are based on organisation specific data, facility or business unit specific information, or direct emission measurements.

For this report, the quality research has been carried out by assessing the representativeness and applicability of the emission factors and other parameters according to the specific characteristics of the organisation. The selection of emission factors has been made focusing on minimising uncertainty as far as possible by choosing the most up-to-date as well as the most representative factors for each activity.

After a rigorous search, the following sources have been used for the different emission factors:

Table 6. Sources of CO_2 emission factors information.

UK Department for "Business, Energy & Industrial Strategy". and Department for "Environment, Food & Rural Affairs". *Conversion Factors 2022, version 2.0*. 2023.
French Agency "de la Transition Écologique" website. https://impactco2.fr/convertisseur.
Spanish Ministry for "Transición Ecológica y el Reto Demográfico". *Calculadora de huella de carbono para organizaciones 2007-2021. V26*. 2022.
Spanish Ministry for "Transición Ecológica y el Reto Demográfico". *Huella de Carbono 2020-2021. Evolución 2018-2021*. 2023.
Spanish Ministry for "Transición Ecológica y el Reto Demográfico". *Huella de Carbono 2019. Evolución 2015-2019*. 2021.
Spanish Ministry for "Transición Ecológica y el Reto Demográfico". *Huella de Carbono 2018. Evolución 2014-2018*. 2020.
Spanish Ministry for "Transición Ecológica". *Huella de Carbono 2017. Evolución 2010-2017*. 2019.
Cornell University. *Cornell Hotel Sustainability Benchmarking index 2021*. 2021

Moreover, emissions have also been searched on the following sources:

Table 7. Sources of CO_2 emissions information.

International Civil Aviation Organization. *Carbon Emissions Calculator*. 2023
International Union of Railways. *UIC Ecocalculator*. 2023.
ResearchGate. *A Carbon Footprint of High-Speed Railways in China*. 2018
ResearchGate. *Quantifying drivers of variability in life cycle greenhouse gas emissions of consumer products.* 2017
ResearchGate. *Comparison of methodologies for estimating the carbon footprint: case study of office paper*. 2012.
Association of Southeast Asian Nations (ASEAN) and German International Cooperation (GIZ). *Tracking sustainable transport in Vietnam: data and policy review for energy efficiency and climate change*. 2015
University College London. *Carbon emission from urban passenger transportation in Beijing*. 2015
Harvard Kennedy School of Government. *The role of electric vehicles in decarbonizing China's transportation sector*. 2019
Statista. *Carbon intensity of the electricity sector in China from 2000 to 2021*. 2023
pcworld.com. *Logitech's new carbon labels show your mouse and keyboard's impact on the environment*. 2021
i.dell.com. *Carbon footprint of a typical business laptop from Dell*. 2010

Metsä Group. *Metsä tissue investigated the carbon footprint of toilet paper*. 2021

Modmo. *What is the carbon footprint of an ebike?*. 2022

Doorstep Ink Cartridges. *Buying compatible printer cartridges? They absolutely add to climate change*. 2022

Library of Stuff CIC. *Steam cleaner mop for cleaning hard floors*. borrow.libraryofstuff.co.uk

Most of the sources used for the emission factors come from official national entities, such as UK Departments, French Agencies and Spanish Ministries. Some of the activities included in the scope 3, have been quantified by means of relating the expenditure involved in each of these activities to the CO_2 emissions generated by their production. The procedure used by the Spanish Ministry to calculate these emission factors is based on the Economic Input-Output Model developed by Wassily Leontief. This method allows the allocation of CO_2 emissions for each monetary unit of expenditure depending on the economic sector in which the expenditure is classified.

Tables 8, 9 and 10 show the emission factors used, indicating their source, country and units.

Table 8. Scope 1 emission factors applied for calculations.

Scope 1 emission factors			
Activity	**Emission factor**	**Unit**	**Source**
Natural gas for heating	2.016	kg CO_2 eq/m3	UK government conversion factors

Table 9. Scope 2 emission factors applied for calculations.

Scope 2 emissions factors			
Activity	**Emission factor**	**Unit**	**Source**
Electricity consumption (China)	0.549	kg CO_2 eq/kWh	Statista
Electricity consumption (UK)	0.211	kg CO_2 eq/kWh	UK government conversion factors
Electricity consumption (Spain)	0.259	kg CO_2 eq/kWh	MITERD. Carbon Footprint Calculator 2022
Electricity consumption (North Macedonia)	0.471	kg CO_2 eq/kWh	IRENA. International Renewable Energy Agency

Table 10. Scope 3 emission factors applied for calculations.

Scope 3 emissions factors			
Activity	**Emission factor**	**Unit**	**Source**
Hotel stay (China)	53.500	kg CO_2 eq/night and room	UK government conversion factors
Hotel stay (Vietnam)	38.500	kg CO_2 eq/night and room	UK government conversion factors

Scope 3 emissions factors			
Activity	**Emission factor**	**Unit**	**Source**
Hotel stay (Spain)	7.000	kg CO_2 eq/night and room	UK government conversion factors
Hotel stay (Lithuania)	4.600	kg CO_2 eq/night and room	CHSB index
Hotel stay (Finland)	5.700	kg CO_2 eq/night and room	CHSB index
Hotel stay (Belgium)	12.200	kg CO_2 eq/night and room	UK government conversion factors
Transportation. Flight	Various	kg CO_2 eq/flight	ICAO Calculator
Transportation. HSR: Beijing - Tianjin	0.046	kg CO_2 eq/km and passenger	ResearchGate
Transportation. HSR: Beijing - Shanghai	0.048	kg CO_2 eq/km and passenger	ResearchGate
Transportation. HSR: Other destinations	0.047	kg CO_2 eq/km and passenger	Estimation
Transportation. Train: Other destinations (China)	0.070	kg CO_2 eq/km and passenger	ResearchGate
Transportation. Train: Other destinations	Various	kg CO_2 eq/trip	EcoPassenger Calculator
Transportation. Subway (China)	0.049	kg CO_2 eq/km and passenger	University College of London
Transportation. Subway (Spain)	0.028	kg CO_2 eq/km and passenger	UK government conversion factors
Transportation. Bus (China)	0.029	kg CO_2 eq/km and passenger	University College London
Transportation. Bus (Other destinations)	0.027	kg CO_2 eq/km and passenger	UK government conversion factors
Transportation. Fuel car (China)	0.182	kg CO_2 eq/km and passenger	University College of London
Transportation. Fuel car (Other destinations)	0.171	kg CO_2 eq/km and passenger	UK government conversion factors
Transportation. Electric car (China)	0.104	kg CO_2 eq/km and passenger	Harvard Kennedy School of Government
Transportation. Electric bike	0.002	kg CO_2 eq/km	Modmo
Transportation. Taxi (China)	0.166	kg CO_2 eq/km and passenger	University College of London
Transportation. Taxi (Other destinations)	0.208	kg CO_2 eq/km and passenger	UK government conversion factors

Scope 3 emissions factors			
Activity	**Emission factor**	**Unit**	**Source**
Transportation. Motorbike (Vietnam)	0.023	kg CO_2 eq/km and passenger	ASEAN & GIZ
Office supply. Tissue	1.400	kg CO_2 eq/kg	Metsä Group
Office supply. Sugar	0.550	kg CO_2 eq/kg	Agence de la Transition Écologique
Office supply. Milk	1.500	kg CO_2 eq/l	Agence de la Transition Écologique
Office supply. Printer	94.000	kg CO_2 eq/printer	Agence de la Transition Écologique
Office supply. A4 sheets	2.500	kg CO_2 eq/500 g	ResearchGate
Office supply. Coffee	0.600	kg CO_2 eq/cup	Agence de la Transition Écologique
Office supply. Mouse	7.840	kg CO_2 eq/mouse	PCWorld
Office supply. Laptop	370.000	kg CO_2 eq/device	Dell
Office supply. Detergent	0.800	kg CO_2 eq/l	ResearchGate
Office supply. Toner cartridge	4.800	kg CO_2 eq/cartridge	Doorstep Ink
Office supply. Water	0.828	kg CO_2 eq/bottle	Agence de la Transition Écologique
Office supply. Mop	3.770	kg CO_2 eq/kg	Library of Stuff
Professional services. Catering & meals	0.224	kg CO_2 eq/€	MITERD. 2021. Servicios de comida y bebida
Professional services. Office supply	0.235	kg CO_2 eq/€	MITERD. 2017. Suministro material electrónico
Professional services. Marketing & advertising	0.450	kg CO_2 eq/€	MITERD. 2018. Publicidad y estudios de mercado
Professional services. Event organisation	0.450	kg CO_2 eq/€	MITERD. 2018. Actividades auxiliares
Professional services. Business trips	0.558	kg CO_2 eq/€	MITERD. 2017. Actividades agencias de viajes
Professional services. Technical services	0.445	kg CO_2 eq/€	MITERD 2021. Actividades profesionales, científicas y técnicas
Homeworking	0.341	kg CO_2 eq/working hour	UK government conversion factors

7.1.3. Emission estimations

If necessary, the estimated emissions for a given source will be compared and cross-checked with available historical databases as well as with various studies already carried out in similar projects. This will require detailed investigations of the quality and accuracy of the data as well as of the calculation methods.

7.1.4. Uncertainty

Two types of uncertainty associated with the selected quantification approach and model are identified:

- **Scientific uncertainty.** This is a quantitative measure of data variability. Existing GHG emission processes are linked to scientific uncertainty due to the possibility that their calculation is not fully understood. This type of uncertainty is extremely difficult to analyse and quantify and is usually beyond the capacity of organisations and is therefore not taken into account in calculations.
- **Estimation uncertainty.** This uncertainty rises from the quantification of GHG emissions. Two types of uncertainty can be distinguished within this type of uncertainty:
    - Model uncertainty. Associated with the equations, mathematical relationships or models used for the characterisation of the different emission parameters and processes. As in the case of scientific uncertainty, the estimation of this type of uncertainty is beyond the management capabilities of the companies and is therefore not taken into account in this document.
    - Parameter uncertainty. Refers to the uncertainty associated with the quantification of the parameters used for the estimation of emissions, such as activity data or emission factors.

Thus, the type of uncertainty to be taken into account in the calculation of GHG emissions will be due to the parameters used (reliability of activity data and emission factors) and, in turn, derived from the uncertainty of the estimate itself.

Uncertainty applies to both activity data and emission factors:

- **Activity data uncertainty.** The overall uncertainty of activity data is a combination of systematic and random errors. Systematic errors are generally small due to the efficiency of the data collection systems that companies currently have in place. Random errors are mainly due to collection errors that may vary from year to year. Based on the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, the uncertainty resulting from the two errors combined could be in the range of ±5% for most developed countries. However, obtaining a quantitative uncertainty for each of the activity data used is a complex process and often difficult for companies to access and calculate due to the lack of quality databases to do so. A qualitative classification of the uncertainty of the activity data that will be used to classify the activity data in the emission inventory is presented below (table 11):

Table 11. Activity data uncertainty classification.

VC. Very Consistent	Activity data has been quantified by instruments subject to legal metrological control for invoicing
CO. Consistent	Data comes from invoices, delivery notes or forms made from reliable information
WE. Weak	Activity data is not obtained directly, but is approximated from other data in a contrasted manner
VW. Very Weak	Activity data is not fully reported, although a reasonable estimate can be made.

Emission factor uncertainty. In the case of the uncertainty of carbon dioxide (CO_2) emission factors from fossil fuel combustion, the uncertainty is relatively low as they are determined by the carbon content of the fuel and thus there are physical limitations on the magnitude of the uncertainty. Emission factors for gases such as methane (CH4) and nitrous oxide (N2O), on the other hand, have a large uncertainty mainly attributed to the lack of relevant measurements and consequent generalisations. In general, the uncertainties of emission factors are poorly known or accessible from empirical data. As a consequence, a qualitative ranking of the uncertainty has been made which, in the same way as for the activity data, will be used for the ranking in the emission inventory (table 12):

Table 12. Emission factors uncertainty classification.

VC. Very Consistent	Emission factor obtained from independent and verified data. The sampling used to obtain the emission factor is optimal and detailed. Its level of uncertainty is very low.
CO. Consistent	Emission factor obtained from independent and verified data. The sampling used to derive the emission factor is sufficient. The level of uncertainty is low.
WE. Weak	Emission factor is obtained from global approximations. Its level of uncertainty is medium.
VW. Very Weak	Emission factor based on approximations or data internal to the organisation and not verified externally. Its level of uncertainty is high.

The uncertainty considered in the emissions is therefore a combination of the uncertainties of the emission factors and those of the corresponding activity data.

8. QUANTIFICATION OF GHG EMISSIONS

In order to determine the methodology and calculation limits used in this carbon footprint study, the following steps are defined:

- Identification and inventory of sources of GHG emissions.
- Selection of quantification methodology and collection of activity data.
- Selection of emission factors consistent with the calculation methodology.
- Calculation of the emissions produced by the company.

Emissions are then identified and calculated according to the type of emission produced in each of the scopes.

8.1. Scope 1 emissions

According to the *UNE EN ISO 14064-1* standard, scope 1 includes category a) direct GHG emissions and removals. The possible direct emissions identified in EIBENS within this category are as follows:

- Emissions from consumption of fossil fuels from stationary sources
    - Emissions from diesel consumption of generators to provide additional electricity supply.
    - Emissions from natural gas consumption for air conditioning of facilities.
- Emissions from consumption of fossil fuels from mobile sources
    - Emissions from fuel consumption in vehicles owned or controlled by EIBENS.
- Other direct emissions
    - Fugitive emissions of refrigerant gases. These emissions stem from air conditioning equipment leakings.
    - CO_2 emissions from fire extinguishers.

Every source is analysed as follows:

8.1.1. Emissions from consumption of fossil fuels from stationary sources

EIBENS has reported consumption data of natural gas used to fuel the heating equipment in the building in which its office is located in China. The facilities where EIBENS operates are owned by a third party, so it is this party that splits the total consumption bill proportionally among all the companies located in the facilities.

Activity Data. Natural gas consumption performed in EIBENS' facilities. This information is supplied by EIBENS and it is based on the information provided by the owner of the property.

Activity Data Uncertainty. Consistent.

Emission Factor. Provided by *Conversion Factors 2022, v 2.0* elaborated by the UK Department for Business, Energy & Industrial Strategy and the Department for Environment, Food & Rural Affairs.

Emission Factor Uncertainty. Very Consistent.

Table 13. Emissions caused by natural gas consumption.

Activity	Month	Consumption (m^3)	Emission factor	Unit	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
Natural Gas for heating	January	804.00	2.016	kg CO_2 eq/m3	1,620.62	1.62
Natural Gas for heating	February	804.00	2.016	kg CO_2 eq/m3	1,620.62	1.62
Natural Gas for heating	March	402.00	2.016	kg CO_2 eq/m3	810.31	0.81
Natural Gas for heating	April	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	May	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	June	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	July	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	August	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	September	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	October	0.00	2.016	kg CO_2 eq/m3	0.00	0.00
Natural Gas for heating	November	402.00	2.016	kg CO_2 eq/m3	810.31	0.81
Natural Gas for heating	December	804.00	2.016	kg CO_2 eq/m3	1,620.62	1.62
					6,482.49	**6.48**

8.1.2. Emissions from consumption of fossil fuels from mobile sources

The company does not own nor control any vehicle to develop its activity. The emissions produced by vehicles owned by employees or rented during business trips are considered within Scope 3. Therefore, **emissions generated by the consumption of fossil fuels from mobile sources within Scope 1 are considered to be zero.**

8.1.3. Fugitive emissions of refrigerant gases

During the year under review, no fugitive emissions of refrigerant gases have been detected at any of the EIBENS facilities, additionally, the company reports no gas refill due to fugitive emission from the refrigeration system. Therefore, **fugitive GHG emissions are considered to be zero.**

Activity Data. Information about refrigerant devices is provided by EIBENS via email.

Activity Data Uncertainty. Consistent.

8.1.4. Emissions from fire extinguishers

EIBENS has reported that there are 4 fire extinguishers in offices where they work, however, no refill has been reported, thus **GHG emissions are considered to be zero.**

Activity Data. Information about refrigerant devices is provided by EIBENS via email.

Activity Data Uncertainty. Consistent.

All sources considered, **total emissions of the scope 1 are 6.48 t CO_2 eq.**

8.2. Scope 2 emissions

The emissions accounted for in scope 2 stem from energy consumption from the electricity grid and are necessary for the development of the company's daily activities.

Likewise natural gas consumption, the facilities where EIBENS operates are owned by a third party, so it is this party that splits the total consumption bill proportionally among all the companies located in the facilities.

Activity Data. Electricity consumed in the facilities in which EIBENS is located. This information is supplied by EIBENS and it is based on the information provided by the owner of the property.

Activity Data Uncertainty. Consistent.

Emission Factor. Provided by Statista. *Carbon intensity of the electricity sector in China from 2000 to 2021*. 2023.

Emission Factor Uncertainty. Very Consistent.

Table 14. Emissions caused by electricity consumption.

Activity	Month	Consumption (kWh)	Emission factor	Unit	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
Electricity	January	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	February	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	March	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	April	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	May	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	June	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	July	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	August	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	September	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	October	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	November	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
Electricity	December	12.272	0.549	kg CO_2 eq/kWh	6.74	0.01
					80.85	**0.08**

Scope 2 emissions are **0.08 t CO_2 eq**.

8.3. Scope 3 emissions

The calculation of indirect emissions in scope 3 involves the identification of other indirect emissions from activities derived from the consumption of materials, services and transport linked to the organisation.

The categories included within this scope, according to *UNE ISO 14064-1* standard, are as follows:

c) indirect GHG emissions from transportation.

d) indirect GHG emissions from products used by the organisation.

e) indirect GHG emissions associated with the use of products from the organisation.

f) indirect GHG emissions from other sources.

Tables 15, 16, 17 & 18 list a breakdown of the activities identified as GHG sources within each Scope 3 category:

Table 15. Transportation activities generating GHG indirect emissions.

c) indirect GHG emissions from transportation	
c.1.	**Commuting.** Emissions associated with the daily commute of EIBENS employees from their homes to the workplace and back.
c.2.	**Business trips.** Emissions produced by the company trips as part of its activity and to deliver services.

Table 16. Sources of indirect emissions caused by products consumed by EIBENS.

d) indirect GHG emissions from products used by the organisation	
d.1.	**Office supplies.** Emissions associated with the purchase of office goods, furniture and computer equipment.
d.2.	**Accommodation.** Emissions associated with the accommodation services of employees travelling on business trips
d.3.	**Technical services.** Emissions generated by services provided to EIBENS.
d.4.	**Training.** Emissions generated by training EIBENS' employees.
d.5.	**Catering & meals.** Emissions generated by food service.
d.6.	**Marketing & advertising.** Emissions caused by marketing and advertising activities provided to EIBENS.
d.7.	**Event organisation.** Emissions generated by the organisation of different kinds of events.
d.8.	**Working from home (WFH).** Emissions caused by using IT equipment when working remotely.
d.9.	**Security and surveillance.** Emissions set off by facilities' security and surveillance.
d.10.	**Cleaning services.** Emissions produced by facilities' cleaning services.
d.11.	**Facilities maintenance.** Emissions stem from general facilities' maintenance.
d.12.	**Water consumption.** Emissions associated with the consumption of water by employees of EIBENS.

Table 17. Sources of indirect emissions associated with the use of products from the organisation.

e) indirect GHG associated with the use of products from the organisation	
e.1.	**Products and services.** Emissions resulting from the use of products and services provided by EIBENS.

Table 18. Indirect emissions from other sources.

f) indirect GHG emissions from other sources	
f.1.	**Waste management.** Emissions consequence of the management of the wastes produced by the organisation.

These are not the only activities generating emissions, however they are the most significant ones happening during the period covered and those for which data can be collected and traced. GHG emissions generated by each activity of these categories, their emission factor and their source is shown in the following sections:

8.3.1. Commuting

In order to account for the emissions due to the daily commuting of employees, specific forms have been designed to collect the distance and means of transportation of each employee. Some of the employees may use several means of transportation in their daily commute.

EIBENS points out that each employee is entitled to work from home (WFH) a day a week, which results in 48 days a year for working remotely, considering 4 weeks off a year. Therefore, 178 is the number of commuting days used for calculations, except for employee 22 who worked during 3 quarters of the year, so 178 days are multiplied by 0.75. Similarly, employees based in Vietnam only commuted for 82 days in 2022.

Activity Data. Daily commuting distance and means of transport. This information is gathered from specific forms provided to every employee.

Activity Data Uncertainty. Very Consistent.

Emission Factor. These data have been obtained from different sources, such as the *Conversion Factors 2022, v 2.0* elaborated by the UK Department for Business, Energy & Industrial Strategy and the Department for Environment, Food & Rural Affairs; Harvard University; University College of London; Modmo; the Association of Southeast Asian Nations (ASEAN) and German International Cooperation.

Emission Factor Uncertainty. Consistent.

Table 19. Yearly commuting emissions per employee and means of transportation.

Employee	Office location	Means of transport	Daily distance (km)	Yearly distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
1	China	Subway	24.00	4,272.00	0.049	208.69	0.21
2	China	Subway	10.00	1,780.00	0.049	86.95	0.09
2	China	Bus	10.00	1,780.00	0.029	50.91	0.05
3	China	Bike	3.40	605.20	0.000	0.00	0.00
4	China	Bus	4.00	712.00	0.029	20.36	0.02
4	China	Bike	4.00	712.00	0.000	0.00	0.00
5	China	Bike/Walk	2.00	356.00	0.000	0.00	0.00
6	China	Subway	13.00	2,314.00	0.049	113.04	0.11
7	China	Bike	5.00	890.00	0.000	0.00	0.00
8	China	Subway	60.00	10,680.00	0.049	521.72	0.52
9	China	Subway	30.00	5,340.00	0.049	260.86	0.26
10	China	Subway	8.00	1,424.00	0.049	69.56	0.07
10	China	Bike	8.00	1,424.00	0.000	0.00	0.00
11	China	Subway	15.00	2,670.00	0.049	130.43	0.13
12	China	Bus	8.00	1,424.00	0.029	40.73	0.04
13	China	Car	9.60	1,708.80	0.182	311.69	0.31
13	China	Subway	3.20	569.60	0.049	27.82	0.03
13	China	Bike	3.20	569.60	0.000	0.00	0.00
14	China	Subway	26.00	4,628.00	0.049	226.08	0.23
15	China	Subway	15.00	2,670.00	0.049	130.43	0.13
16	China	Electric Bike	19.00	3,382.00	0.002	5.07	0.01
17	China	Subway	26.00	4,628.00	0.049	226.08	0.23
18	China	Electric Bike	3.00	534.00	0.002	0.80	0.00
19	China	Car	1.67	296.67	0.182	54.11	0.05
19	China	Bike	1.67	296.67	0.000	0.00	0.00
19	China	Walk	1.67	296.67	0.000	0.00	0.00
20	China	Electric Car	55.00	9,790.00	0.104	1,022.08	1.02
21	China	Car	9.60	1,708.80	0.182	311.69	0.31
21	China	Subway	1.20	213.60	0.049	10.43	0.01
21	China	Taxi	1.20	213.60	0.166	35.45	0.04
22	China	Subway	72.00	12,816.00	0.049	469.55	0.47
22	China	Taxi	3.20	569.60	0.166	70.91	0.07
23	Vietnam	Motorbike	16.00	1,312.00	0.023	30.11	0.03
24	Vietnam	Motorbike	18.00	1,476.00	0.023	33.87	0.03
						4,469.41	**4.47**

The table above shows the distance covered by each employee and the means of transportation, with this information plus the emission factor, the total amount of emissions is calculated. Below, one table shows the data grouping the total emissions per means of transportation, another table groups the total distance and emissions per employee.

Table 20. Total emissions and distance per means of transportation.

Means of transport	Yearly distance (km)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)	% of total emissions
Subway	54,005.20	2,481.64	2.48	55.52%
Electric car	9,790.00	1,022.08	1.02	22.87%
Car	3,714.27	677.48	0.68	15.16%
Bus	3,916.00	112.00	0.11	2.51%
Taxi	783.20	106.36	0.11	2.38%
Motorbike	2,788.00	63.98	0.06	1.43%
Electric bike	3,916.00	5.87	0.01	0.13%
Bike	4,497.47	0.00	0.00	0.00%
Bike/walk	356.00	0.00	0.00	0.00%
Walk	296.67	0.00	0.00	0.00%
	84,062.80	**4,469.41**	**4.47**	

The figure below illustrates the proportion of each means of transport on the emissions

Figure 2. Emissions per means of transportation.

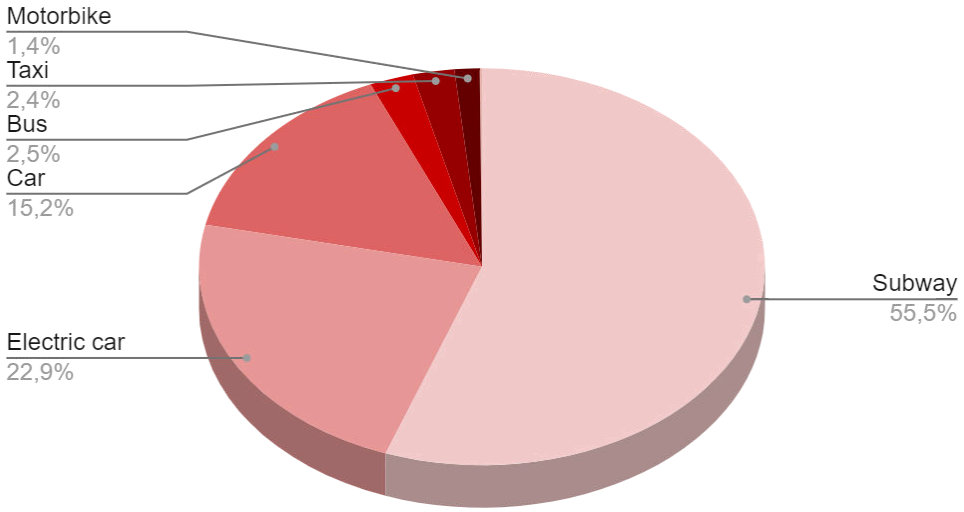
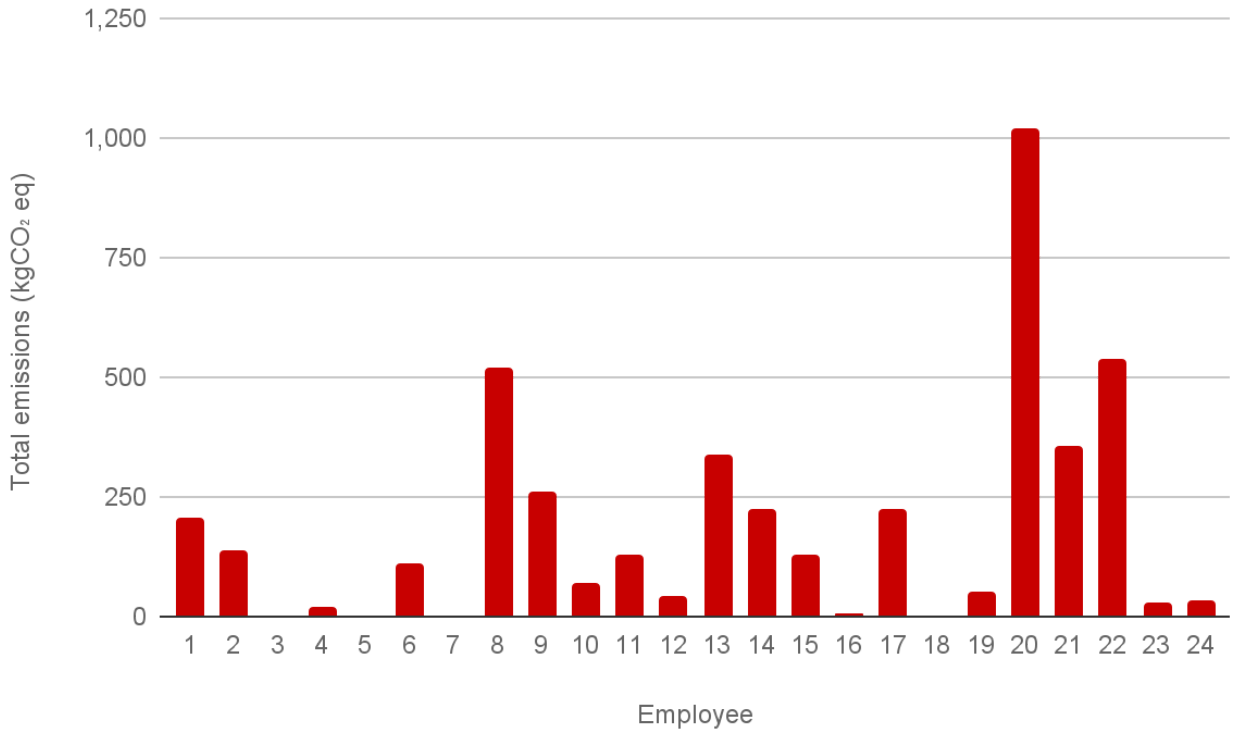


Table 21. total emissions and distance per employee.

Employee	Yearly distance (km)	Total emissions (kg CO_2 eq)
1	4,272.00	208.69
2	3,560.00	137.86
3	605.20	0.00
4	1,424.00	20.36
5	356.00	0.00
6	2,314.00	113.04
7	890.00	0.00
8	10,680.00	521.72
9	5,340.00	260.86
10	2,848.00	69.56
11	2,670.00	130.43
12	1,424.00	40.73
13	2,848.00	339.51
14	4,628.00	226.08
15	2,670.00	130.43
16	3,382.00	5.07
17	4,628.00	226.08
18	534.00	0.80
19	890.00	54.11
20	9,790.00	1022.08
21	2,136.00	357.57
22	13,385.60	540.45
23	1,312.00	30.11
24	1,476.00	33.87
	84,062.80	**4,469.41**

The data is here displayed in figure 3:

Figure 3. Total emissions per employee



As shown above, in 2022, EIBENS' employees travelled a distance of 84,062.80 km on their daily commute, generating **4.47 t CO_2 eq**.

8.3.2. Business trips

The main activity of EIBENS entails multiple business trips in order to participate and organise different events, conferences and meetings that take place in several locations around the world. The calculation of these emissions has been performed taking into account the trips based in China, Vietnam and other places. Additionally, the project associated with each trip is indicated.

Activity Data. Business trips performed by EIBENS employees. This information is supplied by EIBENS and it is based on their own database, receipts and invoices.

Activity Data Uncertainty. Very Consistent.

Emission Factor. The data for the emissions of flights have been gathered from the International Civil Aviation Organization Carbon Emissions Calculator, which supplies information about the specific emissions of each flight. As for Chinese train emissions, factors have been taken from research developed by the Institute of Urban Environment, University of Chinese Academy of Sciences and Xiamen University. Whereas for European trains, emissions have been obtained from specific platforms such as ecopassenger.org and the Spanish government. For other means of transportation, emission

factors have been obtained from the *Conversion Factors 2022, v 2.0* elaborated by the UK Department for Business, Energy & Industrial Strategy and the Department for Environment, Food & Rural Affairs.

Emission Factor Uncertainty. Consistent.

The following table shows the information about every business trip performed by EIBENS' employees. There are routes where GHG emission data is available, if not, an emission factor has been applied which relates kilometres and CO_2 equivalent amount:

Table 22. Emissions caused by business trips.

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Plane	China	N/A	Beijing	Guangzhou	July	1,880.00	N/A	137.60
Plane	China	N/A	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	N/A	Beijing	Guangzhou	July	1,880.00	N/A	137.60
Plane	China	N/A	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	OFS	Beijing	Guangzhou	June	1,880.00	N/A	137.60
Plane	China	OFS	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	OFS	Beijing	Guangzhou	July	1,880.00	N/A	137.60
Plane	China	OFS	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	OFS	Beijing	Guangzhou	July	1,880.00	N/A	137.60
Plane	China	OFS	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	OFS	Wuxi	Chongqing	August	1,331.00	N/A	123.10
Plane	China	OFS	Wuxi	Chongqing	August	1,331.00	N/A	123.10
Plane	China	OFS	Wuxi	Chongqing	August	1,331.00	N/A	123.10
Plane	China	OFS	Chongqing	Tianjin	August	1,431.00	N/A	127.90
Plane	China	OFS	Chongqing	Tianjin	August	1,431.00	N/A	127.90
Plane	China	OFS	Chongqing	Tianjin	August	1,431.00	N/A	127.90
Plane	China	OFS	Shanghai	Beijing	September	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	September	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	September	1,098.00	N/A	100.90
Plane	China	OFS	Beijing	Shanghai	October	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	October	1,098.00	N/A	100.90
Plane	China	OFS	Beijing	Shanghai	October	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	October	1,098.00	N/A	100.90
Plane	China	OFS	Beijing	Shanghai	October	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	October	1,098.00	N/A	100.90
Plane	China	OFS	Beijing	Chengdu	November	1,545.00	N/A	135.40
Plane	China	OFS	Beijing	Chengdu	November	1,545.00	N/A	135.40
Plane	China	OFS	Beijing	Chengdu	November	1,545.00	N/A	135.40

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Plane	China	OFS	Chengdu	Shanghai	November	1,659.00	N/A	154.30
Plane	China	OFS	Chengdu	Shanghai	November	1,659.00	N/A	154.30
Plane	China	OFS	Chengdu	Shanghai	November	1,659.00	N/A	154.30
Plane	China	OFS	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	OFS	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	N/A	Beijing	Haikou	July	2,313.00	N/A	175.60
Plane	China	N/A	Beijing	Haikou	July	2,313.00	N/A	175.60
Plane	China	N/A	Haikou	Beijing	July	2,313.00	N/A	175.60
Plane	China	N/A	Haikou	Beijing	April	2,313.00	N/A	175.60
Plane	China	N/A	Beijing	Haikou	April	2,313.00	N/A	175.60
Plane	China	N/A	Sanya	Guangzhou	January	694.00	N/A	79.00
Plane	China	N/A	Guangzhou	Beijing	January	1,880.00	N/A	137.60
Plane	China	N/A	Beijing	Guangzhou	January	1,880.00	N/A	137.60
Plane	China	N/A	Guangzhou	Beijing	January	1,880.00	N/A	137.60
Plane	China	FFF	Beijing	Guangzhou	September	1,880.00	N/A	137.60
Plane	China	FFF	Guangzhou	Beijing	September	1,880.00	N/A	137.60
Plane	China	FFF	Shanghai	Chongqing	March	1,460.00	N/A	132.80
Plane	China	FFF	Chongqing	Beijing	March	1,461.00	N/A	121.50
Plane	China	FFF	Beijing	Chongqing	March	1,461.00	N/A	121.50
Plane	China	FFF	Chongqing	Beijing	March	1,461.00	N/A	121.50
Plane	China	FFF	Beijing	Chongqing	March	1,461.00	N/A	121.50
Plane	China	FFF	Chongqing	Beijing	March	1,461.00	N/A	121.50
Plane	China	FFF	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	FFF	Beijing	Guangzhou	June	1,880.00	N/A	137.60
Plane	China	FFF	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	FFF	Beijing	Guangzhou	July	1,880.00	N/A	137.60
Plane	China	FFF	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	FFF	Beijing	Guangzhou	July	1,880.00	N/A	137.60
Plane	China	FFF	Guangzhou	Beijing	July	1,880.00	N/A	137.60
Plane	China	FFF	Beijing	Wuhan	August	1,053.00	N/A	104.50
Plane	China	FFF	Beijing	Wuhan	August	1,053.00	N/A	104.50
Plane	China	FFF	Beijing	Wuhan	August	1,053.00	N/A	104.50
Plane	China	FFF	Guangzhou	Beijing	September	1,880.00	N/A	137.60
Plane	China	FFF	Beijing	Guangzhou	September	1,880.00	N/A	137.60

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Plane	China	FFF	Beijing	Shanghai	November	1,098.00	N/A	100.90
Plane	China	FFF	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	FFF	Beijing	Shanghai	November	1,098.00	N/A	100.90
Plane	China	FFF	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	FFF	Beijing	Shanghai	November	1,098.00	N/A	100.90
Plane	China	FFF	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	FFF	Beijing	Shanghai	November	1,098.00	N/A	100.90
Plane	China	FFF	Shanghai	Beijing	November	1,098.00	N/A	100.90
Plane	China	FFF	Qingdao	Shanghai	November	600.00	N/A	74.10
Plane	China	FFF	Qingdao	Beijing	November	513.00	N/A	63.60
Train	China	AEFA	Beijing	Jinan	September	408.00	0.048	19.58
Train	China	AEFA	Jinan	Beijing	September	412.00	0.048	19.78
Train	China	AEFA	Beijing	Jinan	September	408.00	0.048	19.58
Train	China	AEFA	Jinan	Beijing	September	412.00	0.048	19.78
Train	China	AEFA	Beijing	Jinan	September	408.00	0.048	19.58
Train	China	AEFA	Jinan	Beijing	September	412.00	0.048	19.78
Train	China	OFS	Beijing	Suzhou	August	1,181.00	0.048	56.69
Train	China	OFS	Beijing	Suzhou	August	1,181.00	0.048	56.69
Train	China	OFS	Beijing	Suzhou	August	1,181.00	0.048	56.69
Train	China	OFS	Tianjin	Beijing	August	140.00	0.046	6.44
Train	China	OFS	Tianjin	Beijing	August	140.00	0.046	6.44
Train	China	OFS	Tianjin	Beijing	August	140.00	0.046	6.44
Train	China	OFS	Beijing	Shanghai	September	1,215.00	0.048	58.32
Train	China	OFS	Beijing	Shanghai	September	1,215.00	0.048	58.32
Train	China	OFS	Beijing	Shanghai	September	1,215.00	0.048	58.32
Train	China	OFS	Beijing	Hangzhou	September	1,292.00	0.048	62.02
Train	China	OFS	Hangzhou	Beijing	September	1,280.00	0.048	61.44
Train	China	OFS	Beijing	Hangzhou	September	1,292.00	0.048	62.02
Train	China	OFS	Hangzhou	Beijing	September	1,280.00	0.048	61.44
Train	China	OFS	Beijing	Hangzhou	September	1,292.00	0.048	62.02
Train	China	OFS	Hangzhou	Beijing	September	1,280.00	0.048	61.44
Train	China	FFF	Beijing	Tianjin	August	144.00	0.070	10.08
Train	China	FFF	Tianjin	Beijing	August	138.00	0.070	9.66
Train	China	FFF	Wuhan	Beijing	September	1,149.00	0.070	80.43
Train	China	FFF	Wuhan	Beijing	September	1,149.00	0.070	80.43

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Train	China	FFF	Wuhan	Beijing	September	1,149.00	0.070	80.43
Train	China	FFF	Beijing	Hefei	September	1,024.00	0.070	71.68
Train	China	FFF	Hefei	Beijing	September	1,025.00	0.070	71.75
Train	China	FFF	Beijing	Hefei	September	1,024.00	0.070	71.68
Train	China	FFF	Hefei	Beijing	September	1,025.00	0.070	71.75
Train	China	FFF	Beijing	Hefei	September	1,024.00	0.070	71.68
Train	China	FFF	Hefei	Beijing	September	1,025.00	0.070	71.75
Train	China	FFF	Beijing	Qingdao	November	659.00	0.070	46.13
Train	China	FFF	Beijing	Qingdao	November	659.00	0.070	46.13
Train	China	FFF	Beijing	Shanghai	November	1,215.00	0.070	85.05
Train	China	FFF	Beijing	Tianjin	August	144.00	0.070	10.08
Train	China	FFF	Tianjin	Beijing	August	138.00	0.070	9.66
Train	China	FFF	Beijing	Tianjin	August	144.00	0.070	10.08
Train	China	FFF	Tianjin	Beijing	August	138.00	0.070	9.66
Bus	Other	N/A	Granada	Malaga	November	132.00	0.027	3.53
Bus	Other	N/A	Granada	Malaga	December	132.00	0.027	3.53
Car	Other	N/A	Not specified	Not specified	August	316.00	0.170	53.72
Ferry	Other	N/A	Tallinn	Helsinki	September	75.00	0.110	8.25
Metro	Other	N/A	Madrid	Madrid	November	4.70	0.014	0.07
Plane	Other	N/A	Madrid	Paris	July	1,061.00	N/A	112.00
Plane	Other	N/A	Paris	Hanoi	July	9,154.00	N/A	314.60
Plane	Other	N/A	Hanoi	Paris	July	9,154.00	N/A	314.60
Plane	Other	N/A	Paris	Madrid	July	1,061.00	N/A	112.00
Plane	Other	N/A	Madrid	Ho Chi Minh	August	10,100.00	N/A	392.13
Plane	Other	N/A	Madrid	Amsterdam	August	1,456.00	N/A	128.50
Plane	Other	N/A	Amsterdam	Tallinn	August	1,521.00	N/A	137.00
Plane	Other	N/A	Tallinn	Helsinki	August	101.00	N/A	14.70
Plane	Other	N/A	Helsinki	Amsterdam	August	1,521.00	N/A	137.00
Plane	Other	N/A	Amsterdam	Madrid	August	1,456.00	N/A	128.50
Plane	Other	N/A	Madrid	Helsinki	August	2,943.00	N/A	225.30
Plane	Other	N/A	Helsinki	Vilnius	August	631.00	N/A	58.00
Plane	Other	N/A	Vilnius	Helsinki	August	631.00	N/A	58.00
Plane	Other	N/A	Helsinki	Madrid	August	2,943.00	N/A	225.30
Plane	Other	N/A	Madrid	Amsterdam	August	1,456.00	N/A	128.50
Plane	Other	N/A	Amsterdam	Vilnius	August	1,333.00	N/A	125.90

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Plane	Other	N/A	Vilnius	Amsterdam	August	1,333.00	N/A	125.90
Plane	Other	N/A	Amsterdam	Madrid	August	1,456.00	N/A	128.50
Plane	Other	N/A	Madrid	Brussels	August	1,270.00	N/A	117.00
Plane	Other	N/A	Brussels	Madrid	August	1,270.00	N/A	117.00
Plane	Other	N/A	Malaga	London	September	1,675.00	N/A	152.60
Plane	Other	N/A	Malaga	London	September	1,675.00	N/A	152.60
Plane	Other	N/A	Malaga	London	September	1,675.00	N/A	152.60
Plane	Other	N/A	London	Malaga	September	1,675.00	N/A	152.60
Plane	Other	N/A	London	Madrid	September	1,242.00	N/A	121.20
Plane	Other	N/A	Ho Chi Minh	Dubai	September	5,617.00	N/A	346.60
Plane	Other	N/A	Dubai	London	September	5,493.00	N/A	342.30
Plane	Other	N/A	London	Dubai	September	5,493.00	N/A	342.30
Plane	Other	N/A	Dubai	Ho Chi Minh	September	5,617.00	N/A	346.00
Plane	Other	N/A	Sevilla	Lisbon	September	320.00	N/A	64.40
Plane	Other	N/A	Lisbon	Sevilla	September	320.00	N/A	64.40
Plane	Other	N/A	Brussels	Madrid	November	1,270.00	N/A	117.00
Plane	Other	N/A	Madrid	Granada	November	367.00	N/A	93.80
Plane	Other	N/A	Malaga	Madrid	November	431.00	N/A	58.70
Plane	Other	N/A	Madrid	Brussels	November	1,270.00	N/A	117.00
Plane	Other	N/A	Madrid	Helsinki	November	2,943.00	N/A	225.30
Plane	Other	N/A	Helsinki	Vilnius	November	631.00	N/A	58.00
Plane	Other	N/A	Vilnius	Helsinki	November	631.00	N/A	58.00
Plane	Other	N/A	Helsinki	Madrid	November	2,943.00	N/A	225.30
Plane	Other	N/A	Malaga	Helsinki	December	3,349.00	N/A	250.60
Plane	Other	N/A	Helsinki	Malaga	December	3,349.00	N/A	250.60
Plane	Vietnam	N/A	Ho Chi Minh	Vinh	November	885.00	N/A	82.40
Plane	Vietnam	N/A	Vinh	Ho Chi Minh	November	885.00	N/A	82.40
Taxi	Other	N/A	Not specified	Not specified	June	8.50	0.208	1.77
Taxi	Other	N/A	Not specified	Not specified	August	18.80	0.208	3.91
Taxi	Other	N/A	Not specified	Not specified	September	143.55	0.208	29.86
Taxi	Other	N/A	Not specified	Not specified	October	35.20	0.208	7.32
Taxi	Other	N/A	Not specified	Not specified	November	6.30	0.208	1.31
Taxi	Other	N/A	Not specified	Not specified	December	16.28	0.208	3.39
Taxi	Vietnam	N/A	Ho Chi Minh	Ho Chi Minh	October	85.24	0.208	17.75
Taxi	Vietnam	N/A	Ho Chi Minh	Ho Chi Minh	November	241.72	0.208	50.33

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Taxi	Vietnam	N/A	Ho Chi Minh	Ho Chi Minh	December	157.81	0.208	32.86
Train	Other	N/A	Sevilla	Malaga	January	158.00	N/A	5.22
Train	Other	N/A	Malaga	Sevilla	January	158.00	N/A	5.22
Train	Other	N/A	Malaga	Alicante	June	774.00	N/A	22.07
Train	Other	N/A	Granada	Madrid	July	360.00	N/A	8.66
Train	Other	N/A	Madrid	Albacete	July	223.00	N/A	7.80
Train	Other	N/A	Albacete	Madrid	July	223.00	N/A	7.80
Train	Other	N/A	Madrid	Albacete	August	223.00	N/A	7.80
Train	Other	N/A	Albacete	Madrid	August	223.00	N/A	7.80
Train	Other	N/A	Madrid	Alicante	August	359.00	N/A	12.10
Train	Other	N/A	Alicante	Madrid	August	359.00	N/A	12.10
Train	Other	N/A	Madrid	Granada	August	360.00	N/A	8.66
Train	Other	N/A	Madrid	Granada	August	360.00	N/A	8.66
Train	Other	N/A	Malaga	Madrid	September	415.00	N/A	9.97
Train	Other	N/A	Madrid	Malaga	September	415.00	N/A	9.97
Train	Other	N/A	Sevilla	Malaga	September	158.00	N/A	5.22
Train	Other	N/A	Malaga	Sevilla	September	158.00	N/A	5.22
Train	Other	N/A	Sevilla	Granada	September	213.00	N/A	5.12
Train	Other	N/A	Madrid	Sevilla	September	390.00	N/A	9.38
Train	Other	N/A	Granada	Madrid	September	360.00	N/A	8.66
Train	Other	N/A	Granada	Madrid	September	360.00	N/A	8.66
Train	Other	N/A	Madrid	Granada	September	360.00	N/A	8.66
Train	Other	N/A	Granada	Sevilla	September	213.00	N/A	5.12
Train	Other	N/A	Sevilla	Granada	September	213.00	N/A	5.12
Train	Other	N/A	Granada	Madrid	September	360.00	N/A	8.66
Train	Other	N/A	Madrid	Granada	September	360.00	N/A	8.66
Train	Other	N/A	Brussels Airp.	Brussels	September	11.00	N/A	0.60
Train	Other	N/A	Granada	Madrid	September	360.00	N/A	8.66
Train	Other	N/A	Madrid	Granada	September	360.00	N/A	8.66
Train	Other	N/A	Granada	Madrid	September	360.00	N/A	8.66
Train	Other	N/A	Madrid	Granada	November	360.00	N/A	8.66
Train	Other	N/A	Granada	Madrid	November	360.00	N/A	8.66
Train	Other	N/A	Granada	Madrid	November	360.00	N/A	8.66
Train	Other	N/A	Brussels Airp.	Brussels	November	11.000	N/A	0.60
Train	Other	N/A	Brussels Airp.	Brussels	November	11.000	N/A	0.60

Means of transport	Location	Project	Departing from	Arriving at	Month	Distance (km)	Emission factor (kg CO_2 eq/km)	Total emissions (kg CO_2 eq)
Train	Other	N/A	Madrid	Granada	December	360.00	N/A	8.66
								18,301.35

Table 23. Total emissions associated with business trips.

Location	Emissions (kg CO_2 eq)	Emissions (t CO_2 eq)
China	10,851.90	10.85
Vietnam	265.73	0.27
Other	7,183.72	7.18
	18,301.35	**18.30**

Distance travelled by taxi in Vietnam has been calculated based on the average 14,500 VND per kilometre in Ho Chi Minh city, provided by taxi-calculator.com, as the documentation gathered only supplies information about the cost of taxi trips.

"Other" locations are mostly located in the European Union, however, some business trips have been made to the Middle East. Additionally, within "other" locations are also considered trips between China and the EU, and between Vietnam and EU countries.

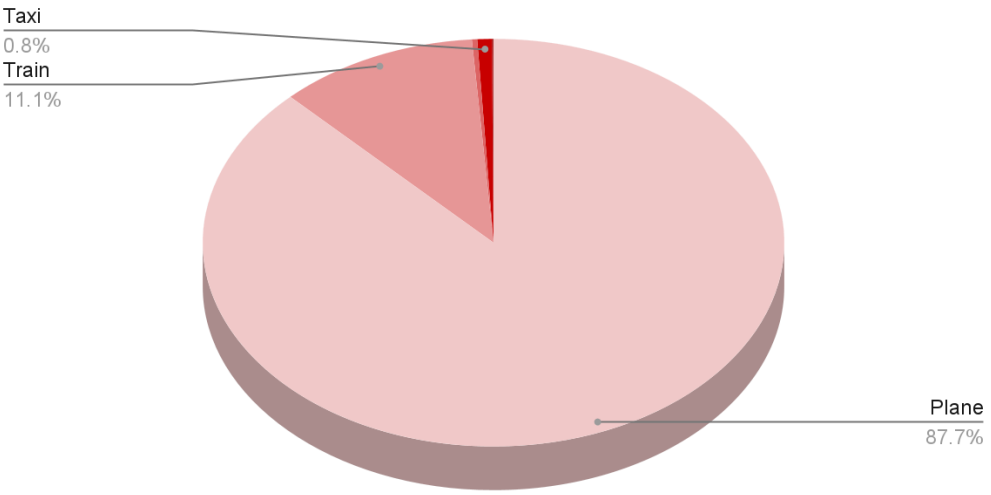
Table 24 groups total distance and emissions per means of transportation reported:

Table 24. Total emissions per means of transportation and location.

Means of transport	Location	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)	% of total emissions
Bus	Other location	7.07	0.01	0.04%
	Total Bus	***7.07***	***0.01***	***0.04%***
Car	Other location	53.72	0.05	0.29%
	Total Car	***53.72***	***0.05***	***0.29%***
Ferry	Other location	8.25	0.01	0.05%
	Total Ferry	***8.25***	***0.01***	***0.05%***
Metro	Other location	0.07	0.00	0.00%
	Total Metro	***0.07***	***0.00***	***0.00%***
Plane	China	9,091.00	9.09	49.67%
	Other location	6,792.33	6.79	37.11%
	Vietnam	164.80	0.16	0.90%
	Total Plane	***16,048.13***	***16.05***	***87.69%***
Taxi	Other location	47.56	0.05	0.26%
	Vietnam	100.93	0.10	0.55%
	Total Taxi	***148.48***	***0.15***	***0.81%***

Means of transport	Location	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)	% of total emissions
Train	China	1,760.90	1.76	9.62%
	Other location	274.73	0.27	1.50%
	Total Train	***2,035.63***	***2.04***	***11.12%***
		18,301.35	**18.30**	

Figure 4. Emissions per means of transportation.



It is important to note that the total emissions of the table and the figure above does not include the emissions caused by trips reported for employees in Vietnam, as information about means of transportation has not been provided.

It is also important to note that Madrid metro receipt does not indicate the distance travelled, so the distance has been set as 4.7 kilometres as the average distance as provided by the regional public transportation agency. It is also important to note that some taxis receipts do not indicate the distance travelled, however, this is considered to be a marginal value compared to the rest of the trips and is therefore excluded from the calculation.

8.3.3. Office supplies

The accounting of GHG emissions related to the purchase of office supplies has been carried out by reviewing the expenses that EIBENS has made on office supplies in the year 2022. In this section, computer equipment and furniture is also considered.

Activity Data. Expenses in Chinese Yuan Renminbi (CNY) in office supplies. This information is provided by EIBENS based on their invoices.

Activity Data Uncertainty. Very Consistent.

Emission Factor. The data for the emissions of each office supply has been taken from the information provided by manufacturers, research articles and the French Agency for the Ecological Transition. For the office located in Vietnam, the emission factor for office supply is set as reported by the Spanish Ministry for the Ecological Transition (MITERD).

Emission Factor Uncertainty. Consistent.

The next table shows the emissions associated with the expenses in office supplies for the office in China:

Table 25. Emissions caused by China office supplies purchase.

Item purchased	Office location	Units	Emission factor (kg CO_2 eq/unit)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
Tissue	China	3.550	1.400	4.97	0.00
Milk	China	10.290	1.500	15.44	0.02
Printer	China	0.340	94.000	32.39	0.03
Tissues	China	2.270	1.400	3.17	0.00
A4 sheets	China	3.040	2.500	7.59	0.01
A4 sheets	China	2.500	2.500	6.25	0.01
Detergent	China	13.390	0.800	10.71	0.01
Coffee beans	China	5.140	0.600	3.09	0.00
Laptops	China	2.000	370.000	740.00	0.74
Coffee beans	China	3.680	0.600	2.21	0.00
Coffee beans	China	5.020	0.600	3.01	0.00
Milk	China	22.420	1.500	33.63	0.03
Mouses	China	2.180	7.840	17.06	0.02
Charger adapter for laptop	China	0.320	94.000	30.26	0.03
Coffee beans	China	5.920	0.600	3.55	0.00
Speaker, microphone, disposable bag, mouse pad	China	4.360	94.000	410.06	0.41
Laptop	China	1.000	370.000	370.00	0.37
Toner cartridge	China	17.950	4.800	86.16	0.09

Item purchased	Office location	Units	Emission factor (kg CO_2 eq/unit)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
Mop used to cleaning the floor	China	2.840	3.770	28.41	0.03
Laptop camera, mouses, charger adapter for laptop	China	9.560	7.840	74.95	0.07
Socket, battery, clips	China	0.610	94.000	57.55	0.06
A4 sheets	China	6.760	2.500	16.90	0.02
Water	China	18.100	0.828	14.99	0.01
Toner cartridge	China	56.850	4.800	272.88	0.27
Toner cartridge	China	17.700	4.800	84.96	0.08
Folder	China	6.680	2.500	16.69	0.02
Hard drive	China	2.500	94.000	234.74	0.23
Sugar, hand cream	China	9.700	0.550	5.33	0.01
				2,586.95	**2.59**

Though the information provided by EIBENS is in CNY, the emission factors data are provided per unit. In order to make both data consistent, the average price per unit of supply purchased is calculated based on the data provided by major suppliers in China such as *globalproductprices.com* and *madeinchina.com*.

The following table shows the emissions associated with the purchase of supplies for the Vietnam office. In this location, description of the items purchased has not been provided, so calculations are based on the price invoiced. As there is no emission factor for Vietnamese office supplies, information published by the Spanish MITERD is applied.

Table 26. Emissions caused by Vietnam office supplies purchase.

Item purchased	Office location	Month	Price as in invoice (VND)	Exchange rate (EUR/VND)	Price as in invoice (EUR)	Emission factor (kg CO_2 eq/€)	Total emissions (kg CO_2 eq)
Not specified	Vietnam	September	3,979,860.00	24,643.00	161.50	0.235	37.95
Not specified	Vietnam	October	3,248,068.00	24,643.00	131.80	0.235	30.97
Not specified	Vietnam	November	27,476,340.00	24,643.00	1,114.98	0.235	262.02
							330.95

The average exchange rate VND/EUR applied is 24,643 as provided by *exchanges-rates.org* for the year 2022.

The overall emissions generated by purchasing office supplies is **2.92 t CO_2 eq**.

8.3.4. Accommodation

For the accounting of emissions for accommodation, the number of nights that the organisation rents for its employees on business trips has been taken into account, as well as the number of rooms and the country, since the emission factor depends on the country.

Activity Data. Number of nights and rooms rented in every different country. This information is provided by EIBENS.

Activity Data Uncertainty. Very Consistent.

Emission Factor. Data taken from the *Conversion Factors 2022, v 2.0* elaborated by the UK Department for Business, Energy & Industrial Strategy and the Department for Environment, Food & Rural Affairs. For those countries with no information available in the latter document, the Cornell Hotel Sustainability Benchmarking index 2021 has been used.

Emission Factor Uncertainty. Very Consistent.

Table 27. Total emissions due to accommodation.

Country	Project	Number of nights	Number of rooms	Month	Emission factor (kg CO_2 eq/night and room)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
Vietnam	N/A	3.00	1.00	August	38.500	115.50	0.12
Spain	N/A	2.00	1.00	August	7.000	14.00	0.01
Spain	N/A	1.00	1.00	August	7.000	7.00	0.01
Spain	N/A	1.00	1.00	August	7.000	7.00	0.01
Spain	N/A	3.00	1.00	September	7.000	21.00	0.02
Spain	N/A	2.00	1.00	September	7.000	14.00	0.01
Spain	N/A	1.00	1.00	September	7.000	7.00	0.01
Spain	N/A	1.00	1.00	September	7.000	7.00	0.01
Spain	N/A	1.00	1.00	September	7.000	7.00	0.01
Lithuania	N/A	1.00	1.00	September	4.600	4.60	0.00
Finland	N/A	1.00	1.00	September	5.700	5.70	0.01
Spain	N/A	2.00	3.00	October	7.000	42.00	0.04
Belgium	N/A	2.00	1.00	November	12.200	24.40	0.02
Spain	N/A	1.00	1.00	December	7.000	7.00	0.01
China	AEFA	3.00	1.00	September	53.500	160.50	0.16
China	AEFA	3.00	1.00	September	53.500	160.50	0.16
China	AEFA	3.00	1.00	September	53.500	160.50	0.16
China	N/A	2.00	1.00	July	53.500	107.00	0.11
China	N/A	2.00	1.00	July	53.500	107.00	0.11
China	OFS	13.00	1.00	June	53.500	695.50	0.70

Country	Project	Number of nights	Number of rooms	Month	Emission factor (kg CO_2 eq/night and room)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
China	OFS	2.00	1.00	July	53.500	107.00	0.11
China	OFS	2.00	1.00	July	53.500	107.00	0.11
China	OFS	8.00	1.00	August	53.500	428.00	0.43
China	OFS	8.00	1.00	August	53.500	428.00	0.43
China	OFS	8.00	1.00	August	53.500	428.00	0.43
China	OFS	2.00	1.00	August	53.500	107.00	0.11
China	OFS	2.00	1.00	August	53.500	107.00	0.11
China	OFS	2.00	1.00	August	53.500	107.00	0.11
China	OFS	3.00	1.00	August	53.500	160.50	0.16
China	OFS	3.00	1.00	August	53.500	160.50	0.16
China	OFS	3.00	1.00	August	53.500	160.50	0.16
China	OFS	2.00	1.00	September	53.500	107.00	0.11
China	OFS	2.00	1.00	September	53.500	107.00	0.11
China	OFS	2.00	1.00	September	53.500	107.00	0.11
China	OFS	2.00	1.00	September	53.500	107.00	0.11
China	OFS	2.00	1.00	September	53.500	107.00	0.11
China	OFS	2.00	1.00	September	53.500	107.00	0.11
China	OFS	1.00	1.00	October	53.500	53.50	0.05
China	OFS	1.00	1.00	October	53.500	53.50	0.05
China	OFS	1.00	1.00	October	53.500	53.50	0.05
China	OFS	2.00	1.00	November	53.500	107.00	0.11
China	OFS	2.00	1.00	November	53.500	107.00	0.11
China	OFS	2.00	1.00	November	53.500	107.00	0.11
China	OFS	8.00	1.00	November	53.500	428.00	0.43
China	OFS	8.00	1.00	November	53.500	428.00	0.43
China	OFS	8.00	1.00	November	53.500	428.00	0.43
China	OFS	1.00	1.00	November	53.500	53.50	0.05
China	OFS	1.00	1.00	November	53.500	53.50	0.05
China	OFS	3.00	1.00	November	53.500	160.50	0.16
China	N/A	9.00	1.00	July	53.500	481.50	0.48
China	N/A	3.00	1.00	July	53.500	160.50	0.16
China	N/A	3.00	1.00	July	53.500	160.50	0.16
China	N/A	11.00	1.00	April	53.500	588.50	0.59
China	FFF	3.00	1.00	January	53.500	160.50	0.16
China	FFF	5.00	1.00	January	53.500	267.50	0.27

Country	Project	Number of nights	Number of rooms	Month	Emission factor (kg CO_2 eq/night and room)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
China	FFF	1.00	1.00	September	53.500	53.50	0.05
China	FFF	2.00	1.00	March	53.500	107.00	0.11
China	FFF	2.00	1.00	March	53.500	107.00	0.11
China	FFF	2.00	1.00	March	53.500	107.00	0.11
China	FFF	14.00	1.00	July	53.500	749.00	0.75
China	FFF	13.00	1.00	June	53.500	695.50	0.70
China	FFF	2.00	1.00	July	53.500	107.00	0.11
China	FFF	1.00	1.00	July	53.500	53.50	0.05
China	FFF	2.00	1.00	August	53.500	107.00	0.11
China	FFF	2.00	1.00	August	53.500	107.00	0.11
China	FFF	2.00	1.00	August	53.500	107.00	0.11
China	FFF	1.00	1.00	September	53.500	53.50	0.05
China	FFF	1.00	1.00	September	53.500	53.50	0.05
China	FFF	1.00	1.00	September	53.500	53.50	0.05
China	FFF	1.00	1.00	September	53.500	53.50	0.05
China	FFF	9.00	1.00	November	53.500	481.50	0.48
China	FFF	9.00	1.00	November	53.500	481.50	0.48
China	FFF	9.00	1.00	November	53.500	481.50	0.48
China	FFF	7.00	1.00	November	53.500	374.50	0.37
China	FFF	3.00	1.00	November	53.500	160.50	0.16
China	FFF	1.00	1.00	November	53.500	53.50	0.05
China	FFF	3.00	1.00	November	53.500	160.50	0.16
China	FFF	1.00	1.00	November	53.500	53.50	0.05
China	FFF	13.00	1.00	November	53.500	695.50	0.70
China	FFF	2.00	1.00	November	53.500	107.00	0.11
						14,032.70	**14.03**

8.3.5. Professional services

EIBENS delivers products and services in conferences and exhibitions, as reported in section 8.3.11. Every professional service provided to EIBENS is included as part of not assigned services in that section, therefore specific data has not been reported.

8.3.6. Working from home

EIBENS rents coworking spaces in China where employees commute to work, however they are entitled to work a day a week from home, this results in 48 days a year. Additionally, they also hire

employees located in different countries who work remotely 226 days a year. The activity of each employee generates CO_2 emissions, an emission factor per working hour is used to calculate them.

Activity Data. The activity data come from the information provided by EIBENS.

Activity Data Uncertainty. Very Consistent.

Emission Factor. The data have been taken from emission factors for homeworking as reported by the UK Department for Business, Energy & Industrial Strategy and the Department for Environment, Food & Rural Affairs.

Emission Factor Uncertainty. Very Consistent.

Table 28. Emissions produced by homeworking activity.

Employees	Location	Period	WFH days	Working hours	Emission Factor (kg CO2 eq/FTE working hour)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
2.00	Spain	Full year/Since October	282.00	2,256.00	0.341	768.73	0.77
22.00	China	Full year	1,056.00	8,448.00	0.341	2,878.66	2.88
1.00	UK	Full year	226.00	1,808.00	0.341	616.08	0.62
1.00	North Macedonia	Since October	56.00	448.00	0.341	152.66	0.15
						4,416.12	**4.42**

8.3.7. Security and surveillance

Security and surveillance is identified as a source of greenhouse gas emissions and there is evidence of consumption at the facilities where EIBENS operates. However, the company has not been able to quantify this consumption, therefore data has not been reported.

8.3.8. Cleaning services

Facilities cleaning service is identified as a source of greenhouse gas emissions and there is evidence of this service taking place at the facilities where EIBENS operates. However, the company has not been able to quantify this consumption, therefore data has not been reported.

8.3.9. Facilities maintenance

The maintenance of the facilities is identified as a source of greenhouse gas emissions and there is evidence of maintenance works at the facilities where EIBENS operates. However, the company has not been able to quantify this consumption, therefore data has not been reported.

8.3.10. Water consumption

Water consumption is identified as a source of greenhouse gas emissions and there is evidence of consumption at the facilities where EIBENS operates. However, the company has not been able to quantify this consumption, therefore data has not been reported.

8.3.11. Products and services

For the accounting of GHG emissions related to products and services provided by EIBENS to their clients, all those products and services that the organisation has contracted during the years under study for the development of different activities have been taken into account, these services are:

- Catering & meals
- Event organisation
- Marketing & advertising
- Technical services
- Training

The information used to calculate the emissions is the expenditure on each service. As there is no conversion factor available for China, Spanish Ministry information has been used. However, due to data privacy, expenditure per service and service disaggregation per project are not disclosed.

Activity Data. Expenditure in euro (€) per service contracted. The activity data comes from the information provided by EIBENS based on invoices.

Activity Data Uncertainty. Very Consistent.

Emission Factor. The data have been taken from professional services factors as reported by the Spanish Ministry for the Ecological Transition.

Emission Factor Uncertainty. Consistent.

Table 29. Total emissions caused by professional services provided by EIBENS.

Location	Service	Emission factor (kg CO_2 eq/€)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
China	Catering & meals	0.224	7,923.42	7.92
China	Event organisation	0.450	124,574.63	124.57
China	Marketing & advertising	0.450	215,298.36	215.30
China	Technical services	0.445	71,261.07	71.26
Europe	Catering & meals	0.224	162.53	0.16
Europe	Technical services	0.445	20,887.07	20.89
Europe	Marketing & advertising	0.450	439.98	0.44

Location	Service	Emission factor (kg CO_2 eq/€)	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)
Europe	Training	0.445	678.58	0.68
Vietnam	Catering & meals	0.224	35.05	0.04
Vietnam	Event organisation	0.450	1,146.02	1.15
Vietnam	Marketing & advertising	0.450	124.99	0.12
			442,531.71	**442.53**

The average exchange rate VND/EUR applied is 24,643 as provided by *exchanges-rates.org* for the year 2022.

The following table (30) groups the emissions by professional service:

Table 30. Emissions by professional service provided by EIBENS.

Service	Total emissions (t CO_2 eq)	% of emissions
Catering & meals	8.12	1.84%
Event organisation	125.72	28.41%
Marketing & advertising	215.86	48.78%
Technical services	92.15	20.82%
Training	0.68	0.15%
	442.53	

Figure 5. Emissions by professional service provided by EIBENS.

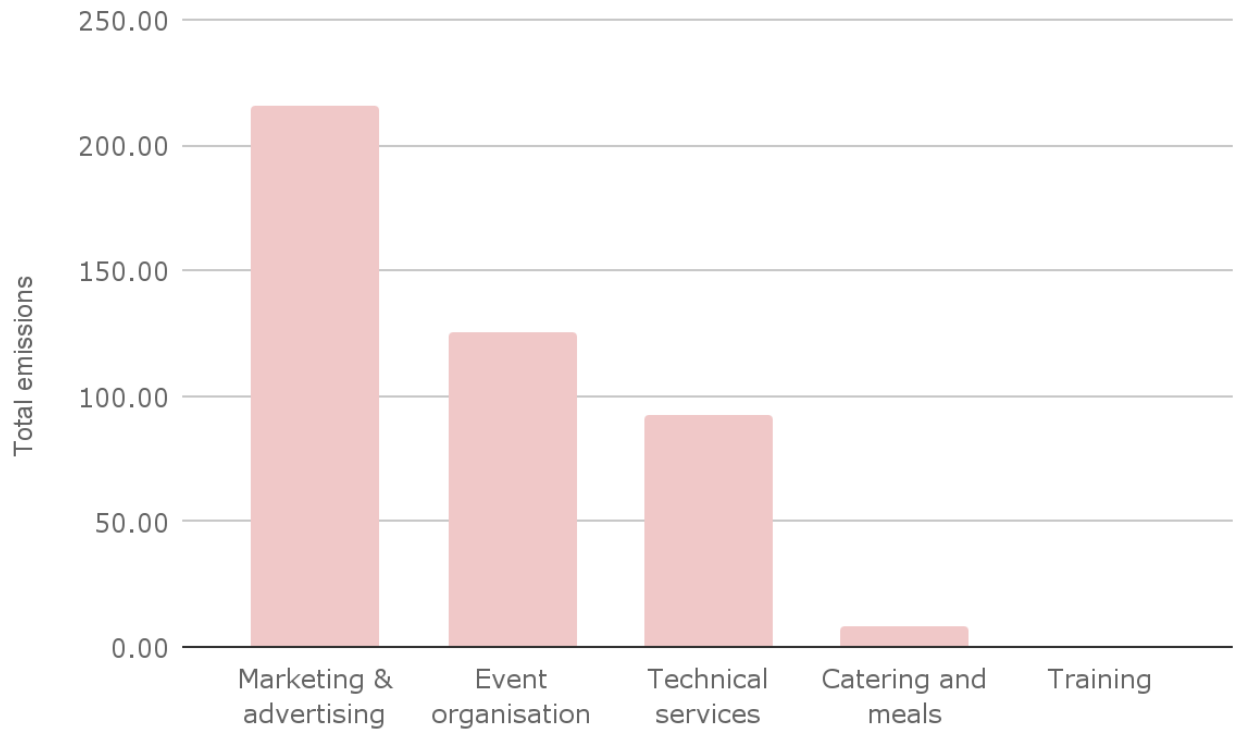
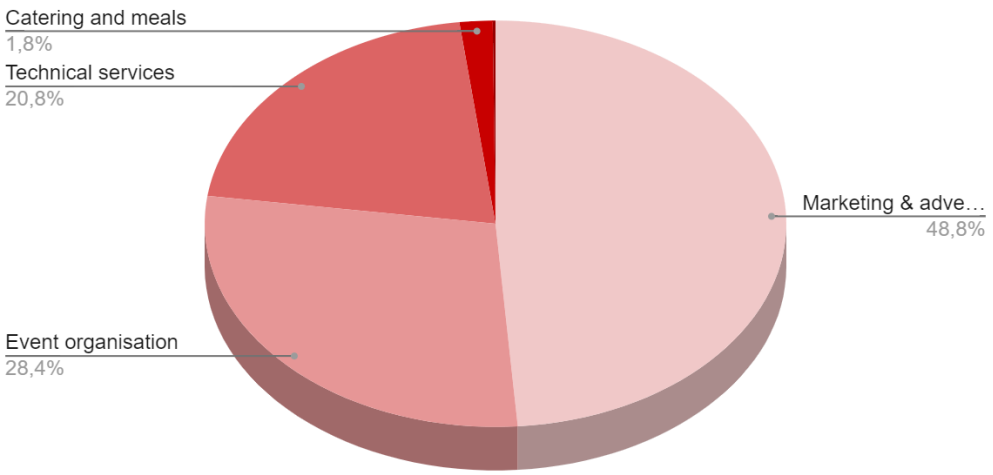


Figure 6. Share of each service.



As shown above, marketing & advertising and event organisation account for approximately 78% of total emissions caused by professional services provided by EIBENS.

Plus, a figure showing the share of every service is also displayed below:

8.3.12. Waste management

Waste management is identified as a source of greenhouse gas emissions and there is evidence of waste generation at the facilities where EIBENS operates. However, the company has not been able to quantify this generation, therefore data has not been reported.

9. CARBON FOOTPRINT CALCULATION

The carbon footprint calculation of EIBENS considers scopes 1, 2 & 3 for the year 2022. The following table shows the emissions generated within each scope as well as the total emissions caused.

The following table (31) indicates the emissions produced by each scope as well as the total amount of CO2 emissions generated by EIBENS, **513.38 t CO_2 eq**.

Table 31. Breakdown of emissions by scope.

			2022	
			Emissions (t CO_2 eq)	% of total emissions
Scope 1	**Direct emissions from consumption of fossil fuels from stationary sources**	Natural gas for heating	6.48	1.31%
		Total emissions scope 1	**6.48**	**1.31%**
Scope 2	**Indirect emissions from consumption from the electricity grid**	Electricity consumption	0.08	0.02%
		Total emissions scope 2	**0.08**	**0.02%**
Scope 3	**Indirect emissions from different activities**	Professional Services	442.53	89.72%
		Business trips	18.30	3.71%
		Accommodation	14.03	2.85%
		Commuting	4.47	0.91%
		WFH	4.42	0.90%
		Office supplies	2.92	0.59%
		Total emissions scope 3	**486.67**	**98.67%**
		Carbon Footprint (Scopes 1, 2 & 3)	**493.23**	**100.00%**

10. ANALYSIS

The total Carbon Footprint for the year 2022 and for scopes 1, 2 & 3 is 493.23 t CO_2 eq, as shown in table 32 and figure 7.

Figure 7. Percentage of emissions by scope.

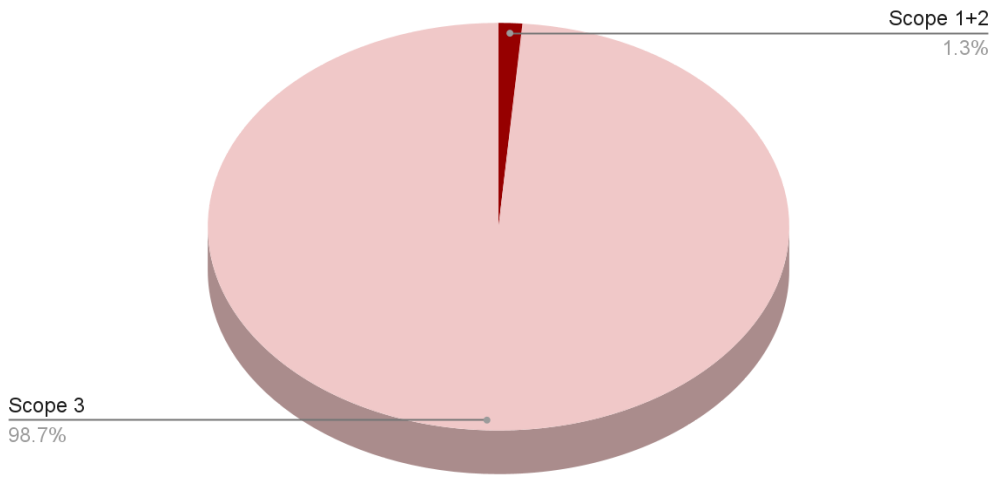


Table 32. Breakdown of emissions by scope.

Scope	Total emissions (kg CO_2 eq)	Total emissions (t CO_2 eq)	% of total emissions
Scope 1	6,482.49	6.48	1.31%
Scope 2	80.85	0.08	0.02%
Scope 3	486,669.19	486.67	98.67%
	493,232.53	**493.23**	

10.1. Scope 1

Total emissions included in scope 1 are **6.48 t CO_2 eq, this amount accounts for 1.31% of total emissions** of EIBENS. The source producing these emissions is the burning of natural gas for heating.

EIBENS has not reported consumption of fossil fuels in mobile sources which are owned or controlled by the company. Likewise, there is no report of leaks from the refrigeration and air-conditioning system operating with refrigerant gases. Similarly, fire extinguishers have not been used during 2022. Subsequently, these sources caused no emissions.

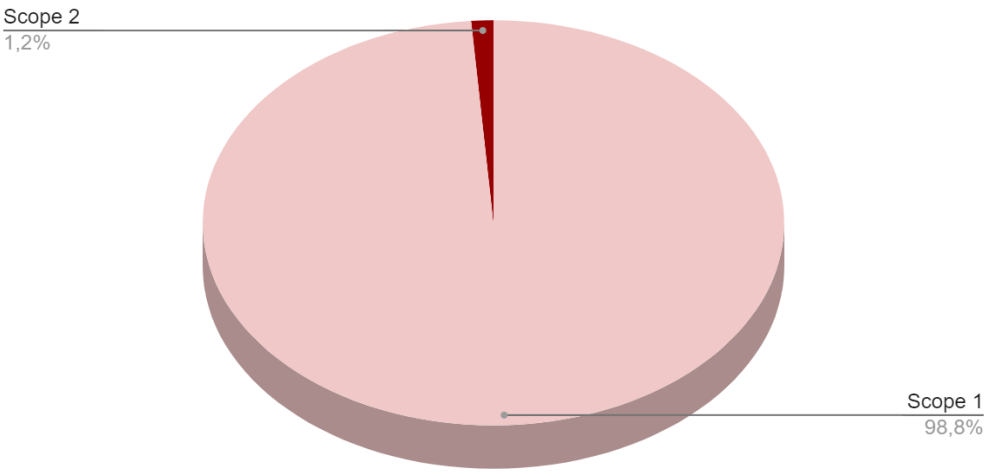
10.2. Scope 2

Emissions caused by electricity consumption in 2022 are **0.08 t CO_2 eq.** This is a marginal amount compared to the other two scopes considered in this report (0.02%).

10.3. Scopes 1+2

At this point, it is interesting to know the share of the emissions generated by activities which are controlled by the company or taking place in facilities controlled by the company. **Scopes 1 and 2 account for 6.56 t CO_2 eq**, the 1.33% of the total emissions. Figure 8 shows that scope 1 accounts for 98.8% of that amount.

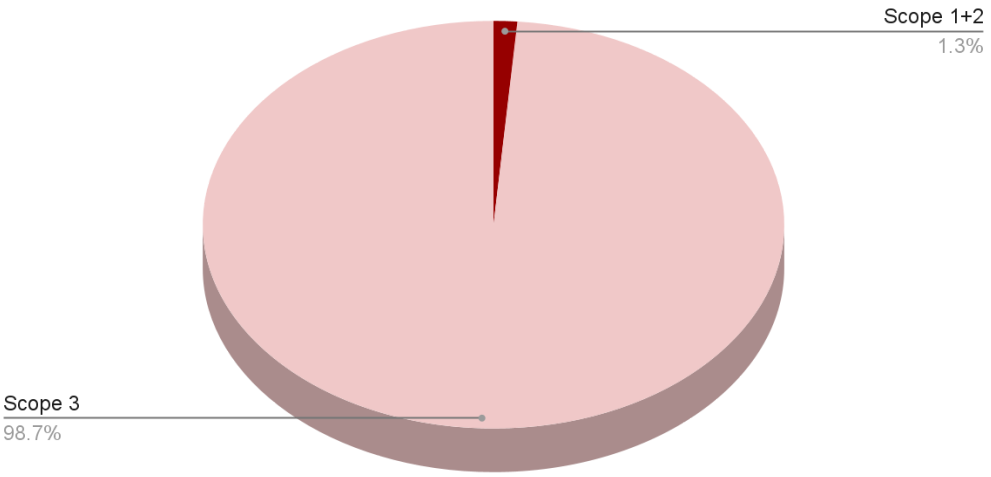
Figure 8. Share of scopes 1 and 2.



10.4. Scope 3

The amount of emissions of this scope is **486.67 t CO_2 eq, which accounts for 98.67% of the total emissions**. Considering the three scopes, the share of each of them is as illustrated below:

Figure 9. Share of each scope in the total emissions.



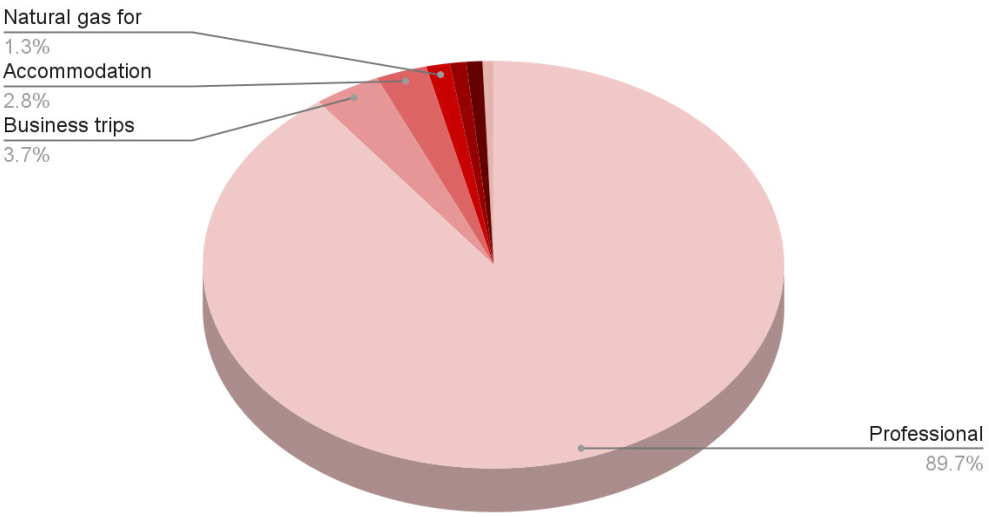
The next table (33) shows the emissions and the percentage of every activity:

Table 33. Emissions and percentage of each activity.

Activity	Emissions ($t CO_2$ eq)	% of total emissions
Professional Services	442.53	89.72%
Business trips	18.30	3.71%
Accommodation	14.03	2.85%
Natural gas for heating	6.48	1.31%
Commuting	4.47	0.91%
WFH	4.42	0.90%
Office supplies	2.92	0.59%
Electricity consumption	0.08	0.02%

Below, another figure illustrates the share of every activity considered in this report, as shown, the activity generating the largest amount of emissions is professional services (89.72%). Then, business trips accounted for 3.71% of the total.

Figure 10. Percentage of emissions of each activity.



10.5. Project distribution

This section deals with the emissions generated by each project. Those emissions with no project assigned are due to activities included within Scopes 1 and 2, and some others such as Working From Home, Commuting and Office Supplies. These sources are not specific to any project.

Table 34. Projects considered and brief description.

Project	Description
FFF	From Farm to Fork (pork)
AEFA	Alfalfa
OFS	Olives From Spain
SFN	Spain Food Nation
N/A	Not Assigned (general emissions)

Based on the calculations made for the previous sections, a table gathering the emission information is shown below:

Table 35. Emissions per project and source, including not assigned emissions.

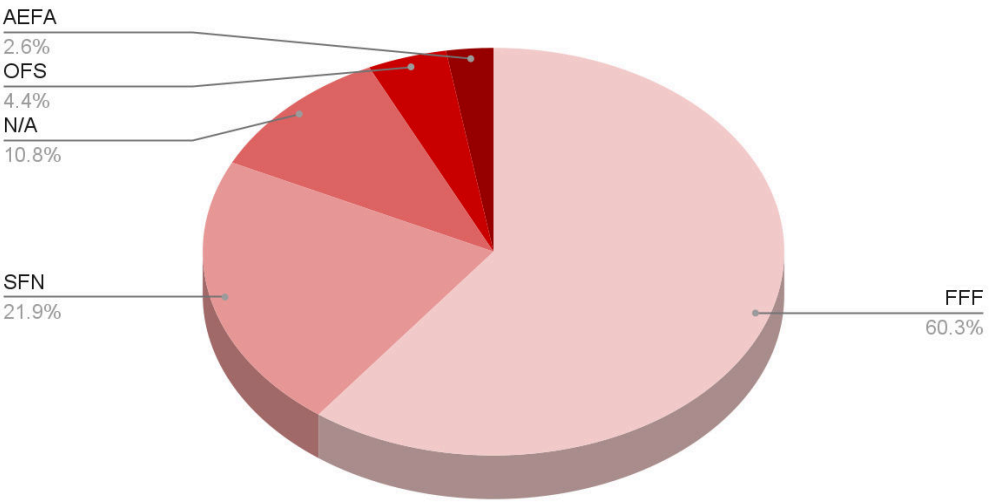
Project	Scope	Source	Emissions (kg CO_2 eq)	Emissions (t CO_2 eq)
FFF	3	Business trips	4,420.41	4.42
FFF	3	Accommodation	5,992.00	5.99
FFF	3	Professional services	286,854.06	286.85
AEFA	3	Business trips	118.08	0.12
AEFA	3	Accommodation	481.50	0.48
AEFA	3	Professional services	12,330.00	12.33
OFS	3	Business trips	4,393.21	4.39
OFS	3	Accommodation	5,671.00	5.67
OFS	3	Professional services	11,698.50	11.70
SFN	3	Professional services	108,174.93	108.17
N/A	3	Business trips	9,369.65	9.37
N/A	3	Accommodation	1,888.20	1.89
N/A	3	Professional services	26,392.12	26.39
N/A	3	Commuting	4,469.41	4.47
N/A	3	WFH	4,416.12	4.42
N/A	1	Natural gas for heating	6,482.49	6.48
N/A	2	Electricity	80.85	0.08
			493,232.53	**493.23**

A table and a figure are shown below to illustrate the total emissions generated by each project and the share of every of them.

Table 36. Total emissions per project.

Project	Emissions (t CO_2 eq)
FFF	297.27
AEFA	12.93
OFS	21.76
SFN	108.17
N/A	53.10

Figure 11. Percentage of project emissions.



As the figure and the table show, 60.3% of the emissions are caused by the FFF project, within this project, most of the emissions were produced by marketing & advertising and event organisation activities. In contrast, the AEFA project only accounts for 2.6% of the total emissions.

10.6. Emission intensity

Every calculation provides significant information for the carbon footprint analysis over time. Nonetheless, the gross carbon footprint needs to be weighted considering the activity of the organisation. With total emissions given for 2022 in t CO_2 eq, carbon intensity can then be calculated by dividing emissions by a relevant measure of activity. For a typical company, this is usually revenues (in million €). In this section, the number of employees is also considered as a relevant measure of activity, as shown in table 37:

Table 37. Carbon footprint intensity per revenue generated and per employee.

Parameter	2022
Revenue (€)	3,651,703.67
Emission intensity (t CO_2 eq / M€)	135.07
Employees (number)	28.00
Emission intensity (t CO_2 eq / employee)	17.62

11. REDUCTION PLAN

The calculation of the carbon footprint is not an isolated action, it is part of a complete cycle in which the carbon footprint is the first step to quantify the direct and indirect emissions derived from the company's activity. Once calculated, the next step is to develop a strategy to analyse and plan potential GHG emission reductions. The implementation of the measures contained in the improvement plan will make reducing the carbon footprint possible, also achieving an optimisation of resources, greater energy efficiency and the consequent economic savings.

The steps for the implementation of a Carbon Footprint Reduction Plan are summarised below:

1. **Calculation of the Carbon Footprint.** It allows us to know the amount of GHG for which the organisation is responsible.
2. **Identification of critical points.** Once the carbon footprint has been calculated, we can identify the main activities that contribute to the generation of GHGs and the areas in which to work in order to reduce them.
3. **Reduction target.** Establishment of one or more improvement targets.
4. **Establishment of an action plan.** For the implementation of the plan, the company must plan the actions, establishing a timetable and those responsible for the implementation of each of the measures.
5. **Periodic review of the objectives.** To ensure that possible deviations are corrected.

Given that point 1 'Calculation of the Carbon Footprint' has already been carried out, the next step will be to identify the critical points.

11.1. Identification of critical points

Following section 10. Analysis, the three largest emission sources of EIBENS are:

- Professional services
- Business trips
- Accommodation

All these sources account for over 90% of the total emissions. However, it is important to note that sources of scopes 1 and 2 are also considered in this section, even if these emissions are marginal and the facilities where the company performs its activity belong to a third party. Reduction measures will be set for every scope, aiming for a reduction of energy consumption and consequently, achieving energy savings.

Homeworking or working from home is a major source of emissions, however it is not considered in this section due to the fact that it is an activity that prevents emissions from other sources such as commuting, heating and electricity consumption.

It is also highlighted the importance of adequately identifying and quantifying emissions sources within Scope 3, as the starting point for calculating, measuring and reducing.

11.2. Reduction target

The reduction target is defined by setting the following points:

- Type of target
- Value of the target
- Base year
- Date of compliance
- Length of compliance

EIBENS' carbon footprint reduction plan establishes for its improvement targets the following:

- Gross target: a 2,5% reduction
- Base year: 2022
- Boundaries for the target are the same as the ones used for the calculation of the carbon footprint
- Date of compliance: July 2024 is set, when carbon footprint calculation will be repeated.
- Length of compliance: yearly.

Thus, the base year for EIBENS' Reduction Plan is 2022, as this is the most recent year for which data is available, so that the expected improvement results can be compared with data from this year. With the implementation of the reduction and improvement measures described in more detail in the following section, it is expected that total GHG emissions (Scopes 2 and 3) can be reduced by at least 3% per year compared to the previous year. Thus, **the carbon footprint of EIBENS is expected to decrease from at least 493.23 t CO_2 eq in 2022 to 480.90 t CO_2 eq** in next year's calculation. In absolute terms, **the carbon footprint is expected to be reduced by at least 12.33 tonnes.**

11.3. Measures

The reduction plan sets measures following an implementation period:

1. **Measures in place:** these measures are already implemented by EIBENS.
2. **General measures to be implemented in the short-term:** measures planned to be implemented over the period from 2023 to 2024. The subsequent emission reductions are difficult to estimate.
3. **Specific measures to be implemented in the short-term:** measures that the organisation plans to implement over the period 2023-2024 and whose reduction has been estimated quantitatively.

The following table shows the measures included in the reduction plan.

Table 38. Measures of the reduction plan.

Measure	Nº	Title	Area
1.Measures in place	1.1.	Waste reduction	Energy efficiency. Sustainability
	1.2.	Energy saving	Energy efficiency. Sustainability
	1.3.	Supporting procurement from sustainable suppliers	Sustainability
2.General measures	2.1.	Awareness and energy savings plan	Energy efficiency. Training
	2.2.	Traceability of data sources	Administration
	2.3.	Best practices on lighting	Energy efficiency. Training
	2.5.	Best practices on the use of IT equipment	Energy efficiency. Training
3.Specific measures	3.1.	Airline tickets purchase based on the GHG emissions caused by the flight	Energy efficiency. Sustainability
	3.2.	Substitution of flight trips by train.	Energy efficiency. Sustainability
	3.3.	Choice of accommodations that offset their emissions	Energy efficiency. Sustainability
	3.4.	Substitution of fuel for electric vehicles for daily commuting	Energy efficiency. Sustainability

11.3.1. Measures in place

These are the actions that the organisation has already implemented by the company. The measures are as follows:

- Waste reduction
- Energy saving
- Supporting procurement from sustainable suppliers

This section shows a sheet per measure proposed to be implemented. All these sheets have the following structure:

- Measure title
- Area
- Objective
- Measure description

Table 39. Measure 1.1. Waste reduction.

MEASURE 1.1.	Waste reduction
AREA	Energy efficiency. Sustainability

OBJECTIVE

To reduce GHG emissions by reusing, promoting recycling and consuming a lower amount of goods and subsequently reducing emissions associated with waste management.

DESCRIPTION

This is a measure which engulfs a set of different specific measures that are implemented by EIBENS' employees when attending coworking spaces and exhibitions. Below is a list of this specific measures implemented by the company:

1. Avoiding plastic/paper glasses. Every employee has its own glass for water/beverage consumption.
2. Wastes are segregated in the office for recycling.
3. Promoting cotton bags instead of plastic bags in the events and exhibitions organised by EIBENS.
4. Reusing material for different events. General design is implemented, if possible, to favour reusing signs and ads.
5. One side printed paper is reused for taking notes or reprinting.

Table 40. Measure 1.2. Energy saving.

MEASURE 1.2	**Energy saving**
AREA	**Energy efficiency. Sustainability**

OBJECTIVE

To reduce GHG emissions associated with energy consumption, habits regarding transportation and use of devices at the office are disseminated among the employees.

DESCRIPTION

This measure includes not only the dissemination of a set of habits that are intended to reduce the energy consumption at the coworking space, exhibitions and transportation, but also energy efficiency and best practices:

1. Switching off and unplugging every electronic device once the day is over.
2. Sharing means of transport when possible, for instance when travelling to an airport or train station.
3. WeChat reminders to improve energy efficiency, for instance by switching off electronic devices that are not in use.

Table 41. Measure 1.3. Supporting procurement from sustainable suppliers.

MEASURE 1.3.	Supporting procurement from sustainable suppliers
AREA	Sustainability

OBJECTIVE

To reduce GHG emissions associated with scope 3 in general, including the procurement of professional services, merchandising activities and the purchase of office supplies and furniture.

DESCRIPTION

EIBENS currently favours contracting with suppliers who apply waste reduction measures. This applies not only to suppliers of materials for events, but also to employees:

1. The company has identified those suppliers for professional purposes that use a smaller quantity of raw materials in the services and products provided. For example, for event celebrations.
2. Similarly, small suppliers of products and services for employees are analysed and their procurement is favoured through the bonus at the end of the year. For example, employees who purchase take-away food from a number of more sustainable suppliers will see their annual bonus increased.

11.3.2. General short-term measures

These are the actions that the organisation plans to implement over the period from 2023 to 2024 and whose emission reductions, in quantitative terms, are difficult to estimate. The measures proposed in the short term are:

- Awareness and savings plan
- Traceability of data sources
- Best practices on lighting
- Best practices on temperature control
- Best practices on the use of IT equipment

This section shows a sheet per measure proposed to be implemented. All these sheets have the following structure:

- Measure title
- Area
- Objective
- Measure description
- Expected results

Table 42. Measure 2.1. Awareness and savings plan

MEASURE 2.1.	Awareness and savings plan
AREA	Energy efficiency. Training

OBJECTIVE

Energy consumption reduction by means of raising awareness and training of EIBENS' personnel.

DESCRIPTION

This measure consists of providing environmental and responsible energy consumption training for office staff. Employee training is a key aspect of saving electricity, so awareness campaigns and training workshops are essential. The aim is to have a workforce that has the necessary knowledge to use energy responsibly in the workplace. It is proven that workers with a higher level of training tend to consume less energy, and this also applies to the working day and the workplace.

Training must be continuous and specific, and can be carried out both through the dissemination of information leaflets (preferably in electronic format) and the organisation of awareness-raising workshops.

As part of this Awareness and Energy Saving Plan, it is also proposed to send environmental awareness emails to office staff.

EXPECTED RESULTS

With the implementation of this measure, employees' electricity consumption will be reduced, which will result in financial savings on electricity bills.

Table 43. Measure 2.2. Traceability of data sources.

MEASURE 2.2.	Traceability of data sources
AREA	Administration

OBJECTIVE

To provide specific information about every source of emission and to quantify them. With this information, accurate calculations will be made, identifying every source especially within scope 3.

DESCRIPTION

This measure proposes a more detailed identification of the sources of GHG emissions. To achieve it, the following actions are proposed:

1. Identify the projects to which expenditures are allocated.
2. Provide information on products and services that generate GHG emissions, such as water consumption and waste.
3. Identify all means of transport and distances travelled.
4. Indicate the units of office supplies purchased.

EXPECTED RESULTS

With a more segregated data source, every source of emission will be identified and measured, so more accurate calculations will be delivered. Additionally, a better reduction plan will be implemented.

Table 44. Measure 2.3. Best practices on lighting.

MEASURE 2.3.	Best practices on lighting
AREA	Energy efficiency. Training

OBJECTIVE

To reduce emissions associated with electricity consumption by training and raising awareness among EIBENS staff on the efficient use of lighting systems.

DESCRIPTION

The best practices regarding lighting are the following:

1. Use of natural light. Making good use of natural light improves the ambience of the illuminated space and reduces energy consumption.
2. Switching off lights. Lights that are not necessary due to enough daylight should be switched off. Every employee must be aware of this.
3. Programming of zoning according to occupancy. In rooms with switch zoning, it is recommended that only the lighting in the occupied zone is used at any given time.

EXPECTED RESULTS

By implementing and following best lighting practices, electricity consumption can be reduced. This energy saving will result in savings on office electricity bills.

Table 45. Measure 2.4. Best practices on the use of IT equipment

MEASURE 2.4.	Best practices on the use of IT equipment
AREA	Energy efficiency. Training

OBJECTIVE

To reduce emissions associated with electricity consumption by training and raising awareness of the staff of EIBENS in the efficient use of IT equipment.

DESCRIPTION

This measure consists of best practices in the offices to be implemented by EIBENS' personnel:

1. Efficient use of equipment. By correctly configuring office equipment, electricity consumption can be reduced. The following guidelines are recommended:
    a. Switching off the screen or other computer equipment when taking breaks.
    b. Setting screen brightness to medium-low.
    c. Switching peripheral equipment not in use.
    d. Activation of power saving options on computers (low power, hibernation, sleep).
2. Us of stand-by power strips. Most office equipment is usually switched off but not disconnected from the grid at night and on weekends. An effective measure to avoid unnecessary electricity consumption during these periods is the use of stand-by power strips.

EXPECTED RESULTS

With the implementation of this measure, employees' electricity consumption will be reduced, which will result in financial savings on electricity bills.

11.3.3. Specific short-term measures

These are the measures that the organisation plans to implement over the period 2022 to 2023 and whose contribution to emission reductions has been estimated in quantitative terms. The measures proposed in the short term are:

- Airline tickets purchase based on the GHG emissions caused by the flight
- Substitution of flight trips by train
- Choice of accommodations that offset their emissions
- Prioritise the choice of catering with local products and zero single-use plastic
- Encouraging the choice of suppliers with environmental labelling

This section shows a sheet per measure proposed to be implemented. All these sheets have the following structure:

- Measure title
- Area
- Objective
- Measure description
- Expected results

Table 44. Measure 3.1. Airline tickets purchase based on the GHG emissions caused by the flight.

MEASURE 3.1.	Airline tickets purchase based on the GHG emissions caused by the flight
AREA	Energy efficiency. Sustainability

OBJECTIVE

To reduce GHG emissions associated with air travel by EIBENS' employees on business trips by choosing flights based on their assigned carbon footprint.

DESCRIPTION

This measure consists of the implementation of a flight selection system based on the carbon emissions query offered by Google Flights. Once the origin, destination and date of travel have been entered, this tool allows flights to be sorted by carbon emissions and the results to be filtered by lower emissions.

To do this, it uses emissions estimates from the European Environment Agency (EEA) with the most up-to-date algorithmic model. Estimates include origin, destination, aircraft type and the number of attendants in each class.

EXPECTED RESULTS

With the implementation and monitoring of this measure, the emissions associated with business trips made by employees of EIBENS can be reduced.

Taking the flight from Beijing to Guangzhou as an example, the tool offers a total of 18 options whose emissions range from 115 kg CO_2 eq to 168 kg CO_2 eq. For the calculation of the flight in this report, the emissions calculated by the ICAO calculator are 137.6 kg CO_2 eq. In case this measure would have been applied, choosing the lowest emissions flight would have caused a decrease of 16.4% of the emissions.

Thus, an estimation is made considering a reduction of 16.4% on the total emissions associated with air travel. In 2022, business flights generated a total of 16.05 t CO_2 eq, accounting for 87.7% of the total Carbon Footprint generated by business trips. This measure means reducing the flights emissions down to 13.4 t CO_2 eq, a reduction of 2.6 t CO_2 eq, a 0.5% regarding the total carbon footprint of EIBENS.

Table 45. Measure 3.2. Substitution of flight trips by train.

MEASURE 3.2.	Substitution of flight trips by train
AREA	Energy efficiency. Sustainability

OBJECTIVE

To reduce GHG emissions associated with business travel by replacing flight trips with train trips, when possible.

DESCRIPTION

This measure consists of replacing trips by air with trips by train among cities connected by train.

EXPECTED RESULTS

With the implementation and monitoring of this measure, the emissions associated with business trips made by employees of EIBENS can be reduced. The example of the round trip Beijing-Shanghai is shown here.

During 2022, 7 flights Beijing-Shanghai plus 13 flights Shanghai-Beijing were taken, the total emissions produced by these 20 trips are 3.5 t CO_2 eq. In case these trips would have been made by train, the total emissions would have been 2.46 t CO_2 eq. This measure results in avoiding the emission of 1.05 t CO_2 eq, 0.2% of the total carbon footprint of EIBENS, only considering the trips between these two cities.

Table 46. Measure 3.3. Choice of accommodations that offset their emissions.

MEASURE 3.3.	Choice of accommodations that offset their emissions
AREA	Energy efficiency. Sustainability

OBJECTIVE

Reduce GHG emissions associated with accommodation, within scope 3, through the choice of hotels that calculate and offset their emissions.

DESCRIPTION

This measure consists of choosing accommodations that calculate their emissions and offset part or all of them.

An increasing number of environmentally conscious hotels are calculating their GHG emissions and offsetting, in most cases, all of them in order to provide a sustainable image for their guests and as a means to compete and stand out from competitors.

EXPECTED RESULTS

With the implementation and monitoring of this measure, the emissions associated with accommodation within scope 3 can be reduced.

Accommodation activities in 2022 generated a total of 14.03 t CO_2 eq (2.9% of the total carbon footprint). Assuming that 70% of the accommodations had offset emissions, the carbon footprint would be reduced by 9.82 t CO_2 eq, over 2% of total EIBENS' carbon footprint.

Table 47. Measure 3.4.Substitution of fuel for electric vehicles for daily commuting.

MEASURE 3.4.	Substitution of fuel for electric vehicles for daily commuting
AREA	Energy efficiency. Sustainability

OBJECTIVE

Reduce GHG emissions generated by means of fuel vehicles for daily commuting.

DESCRIPTION

Although EIBENS has no control on the employees' daily commuting, this measure proposes to substitute fuel cars, taxis and motorbikes for an electric equivalent transportation. Accordingly, fuel cars and taxis are proposed to be substituted by electric cars and motorbikes are proposed to be substituted for electric bikes.

Buses, even if they are fueled vehicles, are not considered due to the fact that they are a collective means of transport.

EXPECTED RESULTS

As analysed in section 8.3.1. the company reports that 3 cars, 2 motorbikes and 2 taxis are used on a daily basis for commuting. Reduction calculations consist of subtracting the emissions produced by electric vehicles from the emissions produced by fuel vehicles.

Electric car emission factor in China is 0.104 kg CO_2 eq/km and passenger, whereas fuel car factor is 0.182 kg CO_2 eq/km and passenger. Considering the 3,714 km made by car per year, 0.29 t CO_2 eq can be saved.

Similarly, taxi emission factor in China is 0.166 kg CO_2 eq/km and passenger, if electric cars were used instead, 0.05 t CO2 eq can be saved on the 783.20 km made per year.

Likewise, substituting fuel motorbikes for electric bikes, 0.14 t CO2 eq could be saved, considering the lower emission factor and the 6,317 km made per year.

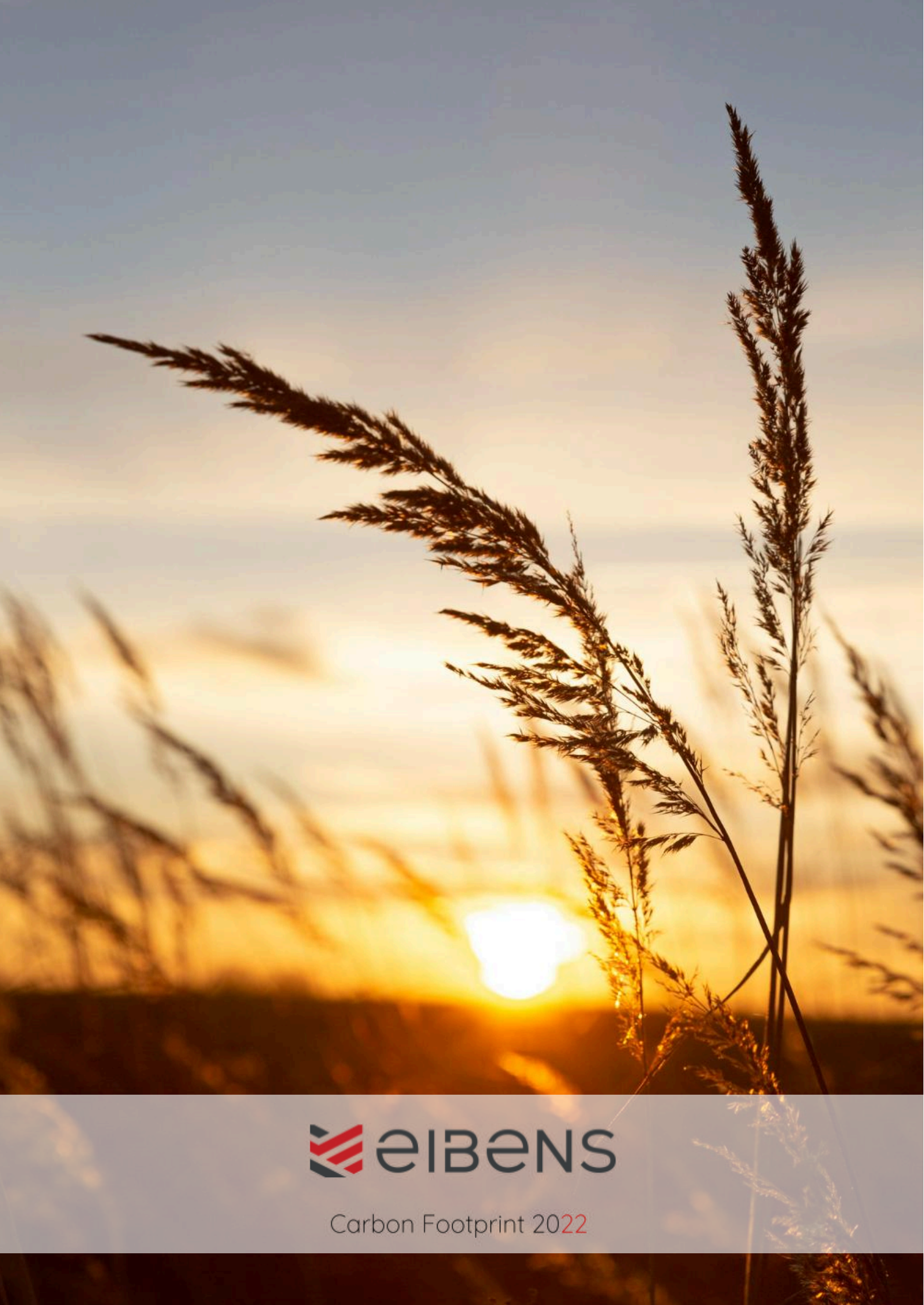
Overall, 0.47 t CO2 eq would be reduced, 0.1% of total emissions.

Below, table 48 summarises the emission reduction potential with the implementation of the measures described above and from which the quantitative emission reduction has been calculated.

Table 48. Reduction measures and expected results.

Measure	Emissions reduction (t CO_2 eq)	Reduction percentage
3.1. Airline tickets purchase based on the GHG emissions caused by the flight	2.64	0.53%
3.2. Substitution of flight trips by train	1.05	0.21%
3.3. Choice of accommodations that offset their emissions	9.82	1.99%
3.4. Substitution of fuel for electric vehicles for daily commuting	0.47	0.10%
	13.98	**2.83%**

Therefore, these measures together with the rest of the generic measures are expected to achieve a **reduction of up to 13.98 t CO_2 eq, an amount that accounts for approximately 2.83% of the total carbon footprint of EIBENS.**



Carbon Footprint 2022