Final Report

Corporate Carbon Footprint

Salema Eco Camp

Vintage 2024, consumption data of 2023

12.12.2024, V02

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Revised and accredited by:

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I Summary

This document presents the results of the Corporate Carbon Footprint (CCF) calculation vintage 2024 of **Salema Eco Camp**, a touristic company located in Praia da Salema, 8650-196 Budens, Algarve, Portugal.

The CCF vintage 2024 is derived from the consumption data recorded during the reference period of the **calendar year 2023** and the methodology used is according the GHG protocol. The company underwent similar carbon footprint calculations with the same methodology in the calendar years of 2020, 2021 and 2022.

The **total emissions** are the sum of the emissions across all the scopes and resulted in a total carbon footprint of **284,5 tons of CO_2e** for the company in 2023 data. The emissions per overnight guest amounted to **2,86 kg of CO_2e**.

The carbon footprint data for Salema Eco Camp in 2023, measured in tons of CO_2 equivalent (CO_2e), is categorized into three scopes with the following contributions (see chart 1):

- **Scope 1 Emissions**: The direct emissions, which come from sources that are owned or controlled by the resort, amounted to **17,1 tons of CO_2e**, comprising 6% of the total. This includes emissions from the company's vehicles as well as the emissions from the combustion of propane gas in heating systems.

- **Scope 2 Emissions**: Indirect emissions from the generation of purchased electricity that the company consumes were reported to be **83,9 tons of CO_2e**, accounting for 29,5% of the total. These emissions result from the consumption of electricity provided by the provider EDP (Energias de Portugal).

- **Scope 3 Emissions**: The largest portion of the company's emissions are under Scope 3, accounting for **183,5 tons of CO_2e**, which is 64,5% of the total emissions.

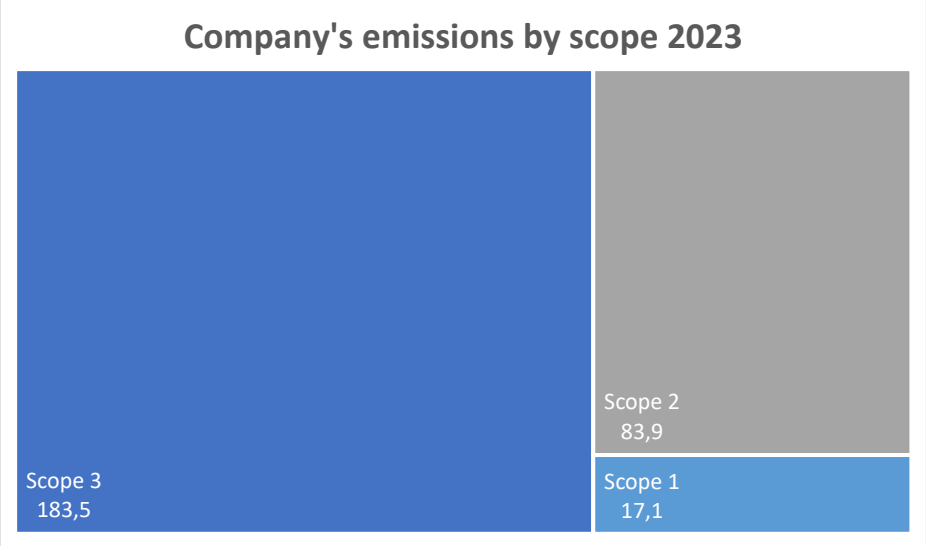


Chart 1 – Distribution of the total Carbon Footprint calculation 2023 by scope. The higher contribution is scope 3.

II Results by overtime

The carbon footprint report for the resort is outlined under the Greenhouse Gas (GHG) Protocol's three scopes, which detail the different types of emissions sources.

Tons of CO2e	2020	2021	2022	2023
Scope 1	12,28	17,46	30,58	17,1
Scope 2	41,47	39,75	24,41	83,9
Scope 3	97,43	120,88	122,44	183,5
Total	**151,18**	**178,09**	**177,43**	**284,5**

Table 1: Results of calculation over the years, through the scopes and total emissions.

As it is shown in table 1, scope 1 had a significant decrease from 2022 to 2023, due to the investments made in one more bathroom much used by clients that is exclusively heated by solar panels that led to the less consumption of natural gas. Through the years, the predominant portion of the resort's total emissions are from scope 3 sources. From 2020 to 2023, the total increase in Scope 3 emissions was 86,07 tons, due to the increase of items accounted in the CCF calculation through the years. This scope 3 includes a variety of activities that are challenging to measure and manage. Quite some time and effort were spent on collecting individual items and researching corresponding emission factors. However, due to the large number of individual goods purchased during the reference period, data on some items could not be gathered which is why Salema Eco Camp adds a margin of 10% in the result of the carbon footprint calculation to invest in decarbonization projects.

The company's total emissions increased year after year (see table 1) and from this report a reduction action plan of the Carbon Footprint must be carried out to implement in 2025 and results in decreasing of the total emissions.

Over the period 2020-2022, **the emissions per overnight guest** decreased notably (see table 2 and chart 2), denoting an improvement in emissions efficiency per overnight guest. It should be noted that the number of overnight guests also increased from 2020 to 2023.

	2020	2021	2022	2023
Total (tons CO2e)	151,18	178,09	177,43	284,5
Overnight stays (nr.)	45 906	60 365	86 190	99 476
Carbon Footprint per overnight stay (kg CO2e)	3,29	2,95	2,06	2,86

Table 2: Overnight stays and Carbon footprint per overnight stay through the years 2020 to 2023.

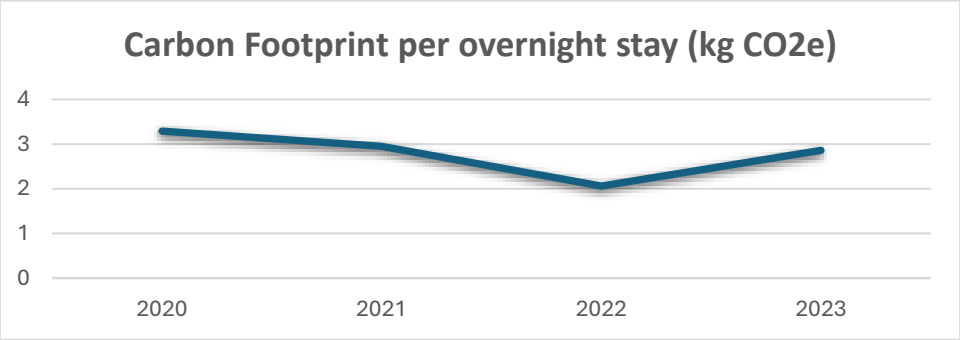


Chart 2 – Carbon footprint per overnight stay (kg CO2e) per year of calculation.

The number of overnight guests staying at Salema Eco Camp has also increased during this period and the carbon footprint per overnight stay decreased. In 2023, although the number of overnight guests increased, the Carbon Footprint didn't decrease. In 2023 the result was 2,86 kg of CO_2e, meaning a rise of 0,8 kg CO_2e compared with the previous year (2,06 kg of CO_2e 2022).

III Detailed results

The results by scopes and categories according to GHG Protocol are in table 3.

Scopes & Categories	Tons CO_2e	Source of CO_2e emission factor
Scope 1	***17,1***	
Fuels	17,1	Purchases invoices
Scope 2	***83,9***	
Purchased energy	83,9	Purchases invoices
Scope 3	***183,5***	
Use of sold products	**87,8**	
Restaurant	55,56	Agribalyse 3.1.1, AIM previous consultancies, ADEME Base Empreinte V23.4, impactco2.fr
Ecostore	32,28	Agribalyse 3.1.1, ADEME Base Empreinte V23.4, impactco2.fr
Waste generated	**58,6**	
Fresh water	2,26	DEFRA 2022
Waste water	4,07	DEFRA 2022
Recycling waste	7,18	Ecoinvent 3.7
General waste	45,09	Ecoinvent 3.7
Purchased Services & Goods	**10**	
Paper printing	0,07	ADEME Base Empreinte V23.4
Cleaning products	3,27	ADEME Base Empreinte V23.4
Furniture & Construction	3,23	ADEME Base Empreinte V23.4
Others	3,43	ADEME Base Empreinte V23.4
Upstream transports	**8,7**	DEFRA 2024
Employee commuting	**18,3**	DEFRA 2024
Business trips	**0,1**	DEFRA 2024
Total scopes 1+2+3	**284,5**	**Margin of 10% = 28,45 tons CO_2e**

Table 3 – Detailed results Carbon footprint by Scopes and categories according to GHG Protocol.

In chart 3 there are the emissions that occur in the company value chain, but that are outside the direct control of the company, as they depend on suppliers & clients choices. In this chart we can see represented the consumption of the restaurant (55,56 tons of CO_2e), ecostore (32,28 tons of CO_2e), waste and wastewater management (58,60 tons of CO_2e), employee commuting (18,38 tons of CO_2e) and other areas (18,7 tons of CO_2e).

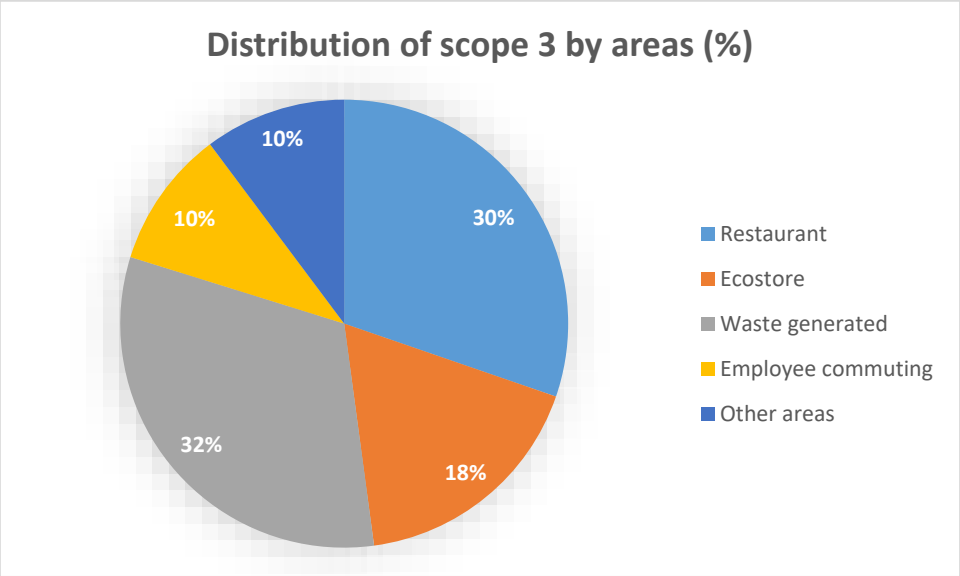


Chart 3 – Distribution of the Scope 3 by areas, where it is shown that the higher contribution areas are the Waste and Wastewater (32%) and Restaurant (30%), followed by the Ecostore (17%). These sources of CO_2e emissions are outside the direct control of the company.

In chart 4 there are the emissions that occur inside the categories of scope 3. The biggest category is the use of sold products (encompassing restaurant and ecostore) which represent 87,8 tons of CO2e.

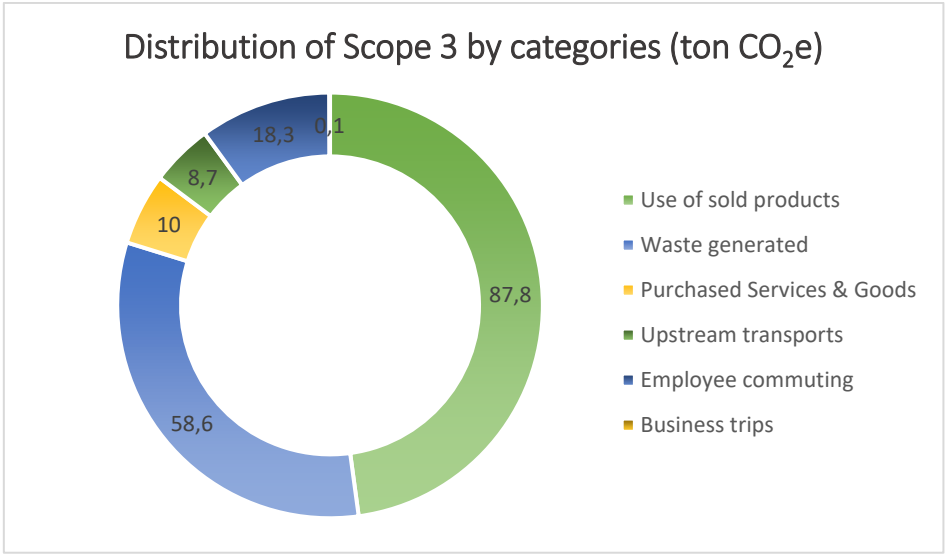


Chart 4 – Distribution of the Scope 3 by categories of GHG Protocol in tons of CO_2e.

IV Project description

This document presents the final results of the Corporate Carbon Footprint (CCF) calculation vintage 2024 (data of 2023) of Salema Eco Camp, located in Praia da Salema, 8650-196 Budens, Algarve, Portugal.

The methodology for the calculation adheres to the principles and guidelines of the Greenhouse Gas Protocol (GHG Protocol), a globally recognized framework for GHG emission accounting and reporting. Its prevalent Corporate Accounting and Reporting Standard allows organizations to assess, understand and manage GHG emissions. Emissions under the Corporate Standard value chain are categorized into 3 distinct 'scopes' and several categories (see figure 1):

- Scope 1: Direct GHG emissions from sources that the company owns or controls.
- Scope 2: Indirect GHG emissions from the consumption of purchased electricity.
- Scope 3: Other indirect GHG emissions that result from the company's activities but originate from sources outside its direct control.

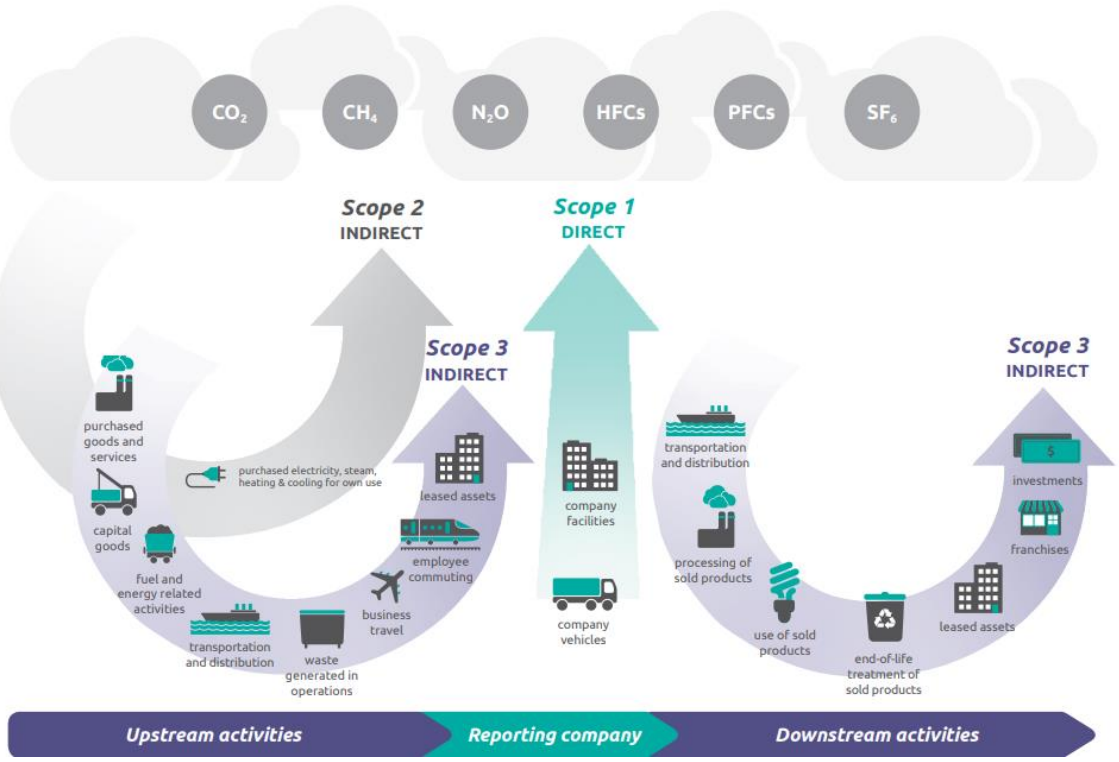


Figure 1: Overview of GHG Protocol scopes and emissions across the value chain

The measurement of GHG emissions encompasses seven specific gases [Carbon dioxide (CO_2), Methane (CH4), Nitrous oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF6), Nitrogen trifluoride (NF3)], and to determine the overall impact, the Global Warming Potential (GWP) measures the contribution of these gases to the greenhouse effect over a standard period (100 years),

compared to Carbon Dioxide. This leads to the calculation of the company's total emissions in Carbon Dioxide Equivalent (CO_2e) tons or kilograms.

Consumption data for the reference period was collected directly at the company level. This involves collecting comprehensive data on energy usage, purchased goods, fuel consumption, waste management, employee commuting and other relevant operational activities that contribute to GHG emissions.

The accuracy and comprehensiveness of this data are critical for ensuring the integrity of the carbon footprint calculation. Therefore, the consumption data and conversion factors were reviewed by ZERO – Associação Sistema Terrestre Sustentável, a renowned portuguese Environmental Non-Government Organization.

While addressing Scopes 1 and 2 is mandatory, the company also included Scope 3 emissions in the calculation derived from other value chain activities. This recognition is contingent upon the relevance of these emissions for the company's business model and the feasibility of data collection.

The Scope 3 Standard divides emissions into 15 distinct categories (of which 6 are applicable categories to Salema Eco Camp), providing a comprehensive view of the indirect emissions linked to the company's operations. The specific categories deemed relevant for the company's business model and hence are included in the calculation of the company's carbon footprint (listed in chart 3) are:

- Purchased Goods & Services
- Upstream transportation
- Waste generated in operations
- Employee commuting
- Business travel
- Use of sold products (restaurant + ecostore)

The impact calculation is based on up-to-date emission factors stemming from various reputable databases among: DEFRA 2023&2024, Ecoinvent 3.7, ADEME (base-empreinte), Fraunhofer Institute, Agribalyse 3.1.1, impactco2.fr and AIM previous consultancies.

Factors used in the calculation and their respective sources are listed in the detailed results of the excel document "CCF Salema 2023_v31102024" which was the base of this report.

A detailed methodology and project goals were elaborated by the consultancy company AIM – Advice in Motion, in the reference document titled "*Project Description – CCF Salema Eco Camp" in the version of August 2nd, 2021*.

Data was collected on site at the company. Reference is made to the document *" CCF Salema 2023_v21.11.2024"* in the version of November 21st, 2024.

The calculation of the company's corporate carbon footprint is part of a comprehensive sustainability strategy. This strategy considers material sustainability aspects for the company's business model and is oriented towards a selection of applicable and sustainable development goals of the United Nations (SDGs). Climate action is one of the relevant development goals and is of particular importance.

V Organization Responsible for Process Review

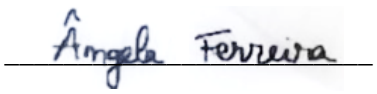
ZERO - Associação Sistema Terrestre Sustentável (Sustainable Earth System Association) is a non-governmental, non-profit environmental organization with public utility and national scope. It carries out its activities in complete independence from political parties, companies and for-profit entities, religious organizations and the government. It was created at the end of 2015 as a result of the common interest of around a hundred people in defending the values of sustainability.

ZERO's vision is of a fair and just world, where the well-being of present and future generations is ensured while respecting the planet's natural balances and life in all its forms. To achieve this vision, ZERO works every day with the mission of making sustainability the structuring element of national and international public policies, through dialogue with political decision-makers and companies, coordination with similar organizations and social pressure, mobilizing society through communication, training and awareness-raising.

In this work, ZERO had the responsibility to review the calculations, including (1) the emission factors and their sources, (2) the assumptions made in a preliminary analysis of the consumption data, (3) the coherence in data analysis and (4) the veracity of the results.

VI Signatures of the report

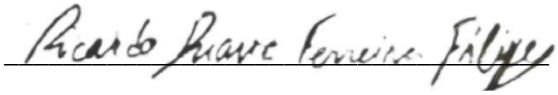
These entities and people ensure the veracity of the calculations and this report.



Ângela Ferreira

Sustainability officer of Salema Eco Camp

Budens, 12th December 2024



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Ericeira, 12th December 2024