

**Final Report**  
**Corporate Carbon Footprint**  
**Salema Eco Camp**

Vintage 2023, consumption data of 2022

**23.01.2024, V03**

**AIM - Advice in Motion GmbH**

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## I. Summary

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

The CCF vintage 2023 is derived from the consumption data recorded during the reference period of the **calendar year 2022**. The company underwent a similar carbon footprint assessment in 2022 (reference period was the calendar year 2021) and in 2021 (reference period was the calendar year 2020).

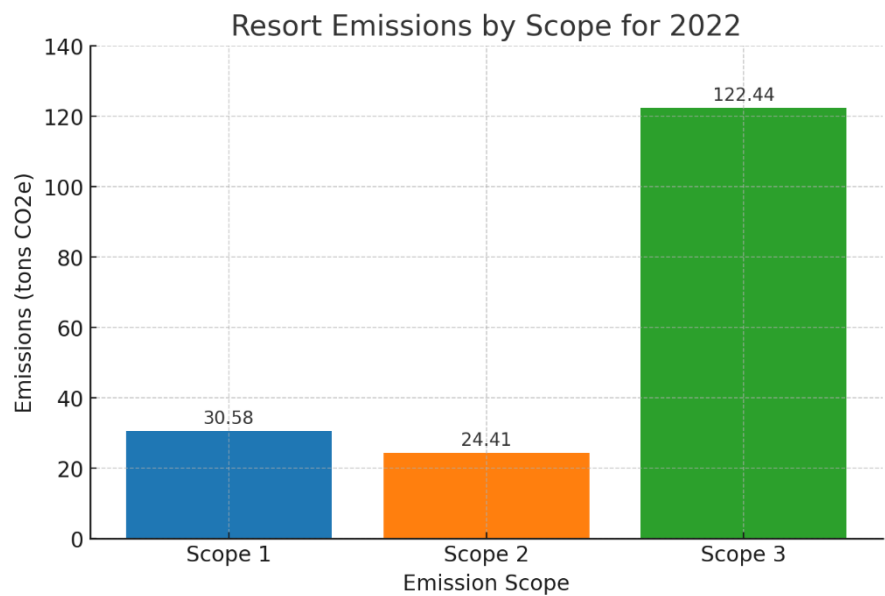
The carbon footprint data for the resort in 2022, as measured in tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e), is categorized into three scopes with the following contributions:

- **Scope 1 Emissions:** The resort's direct emissions, which come from sources that are owned or controlled by the resort, amounted to **30,58 tons of CO<sub>2</sub>e**, comprising 17,23% of the total. This includes emissions from the resort's vehicles as well as the emissions from the combustion of wood pellets and propane gas in heating systems.
- **Scope 2 Emissions:** Indirect emissions from the generation of purchased electricity that the resort consumes were reported to be **24,41 tons of CO<sub>2</sub>e**, accounting for 13,76% of the total. These emissions result from the consumption of electricity provided by Energias de Portugal (EdP).
- **Scope 3 Emissions:** The largest portion of the resort's emissions fell under Scope 3, accounting for **122,44 tons of CO<sub>2</sub>e**, which is 69,01% of the total emissions. These are emissions that occur in the resort's value chain such as the consumption of food items and beverages, waste management, and employee commuting.

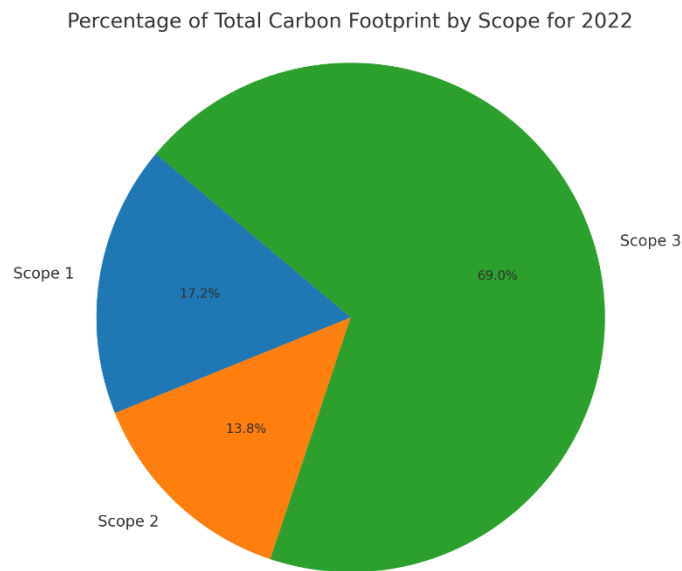
**Total Emissions:** The sum of the emissions across all three scopes resulted in a total carbon footprint of **177,43 tons of CO<sub>2</sub>e** for the resort in 2022.

While the resort's total emissions increased year after year, It should be noted that the number of overnight guests also increased from 2020 to 2022. Over that period, **the emissions per overnight guest** decreased notably, denoting an improvement in emissions efficiency per overnight guest. In 2022, emissions per overnight guest amounted to **2,06 kg of CO<sub>2</sub>e**.

	Reference period 2022
Scope 1	30,58
Scope 2	24,41
Scope 3	122,44
Total (tons of CO <sub>2</sub> e)	<b>177,43</b>



**Chart 1:** The resort's emissions for 2022 by scope. The chart illustrates the breakdown of direct and indirect emissions in absolute terms, with Scope 3 emissions being the most significant.



**Chart 2:** The resort’s emissions for 2022 by scope in percentage terms.



## II. Project description

The organisational unit for the calculation of this footprint is the company's facilities in Praia da Salema, 8650-196 Budens, Algarve, Portugal. The reference period for this calculation is the **calendar year 2022**.

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. Developed as a collaborative initiative, the GHG Protocol standardizes the accounting and reporting of GHG emissions. Its prevalent Corporate Accounting and Reporting Standard enables organizations to inventory, understand, and manage their GHG emissions. Emissions under the Corporate Standard are categorized into three distinct 'scopes':

- 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.

The measurement of GHG emissions encompasses seven specific gases:

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF<sub>6</sub>)
- Nitrogen trifluoride (NF<sub>3</sub>)

To determine the overall impact, the Global Warming Potential (GWP) of each gas is assessed. GWP measures a gas's contribution 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<sub>2</sub>e) units.

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 accuracy of consumption data was reviewed with



the company in form of a preliminary results report. Changes and amendments are considered in this final results report.

While addressing Scopes 1 and 2 is mandatory, the company has chosen to also include selected Scope 3 emissions derived from other value chain activities in the calculation. 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, providing a comprehensive view of the indirect emissions linked to a 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 are listed in the overall results table.

The impact calculation is based on up-to-date emission factors stemming from various reputable databases. Factors used in the calculation and their respective sources are listed in the detailed results section of this report.

A detailed methodology and project goals are elaborated in the reference document titled *"Project Description – CCF Salema Eco Camp" in the version of August 2<sup>nd</sup>, 2021*.

Data was collected on site at the company. Reference is made to the document *"Data collection sheet – Salema Eco Camp"* in the version of November 15h, 2023.

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.



### III. Results description

In 2022, the **overall emissions** for the resort came to **177,43 tons of CO<sub>2</sub>e**, with the predominant portion attributed to Scope 3 emissions.

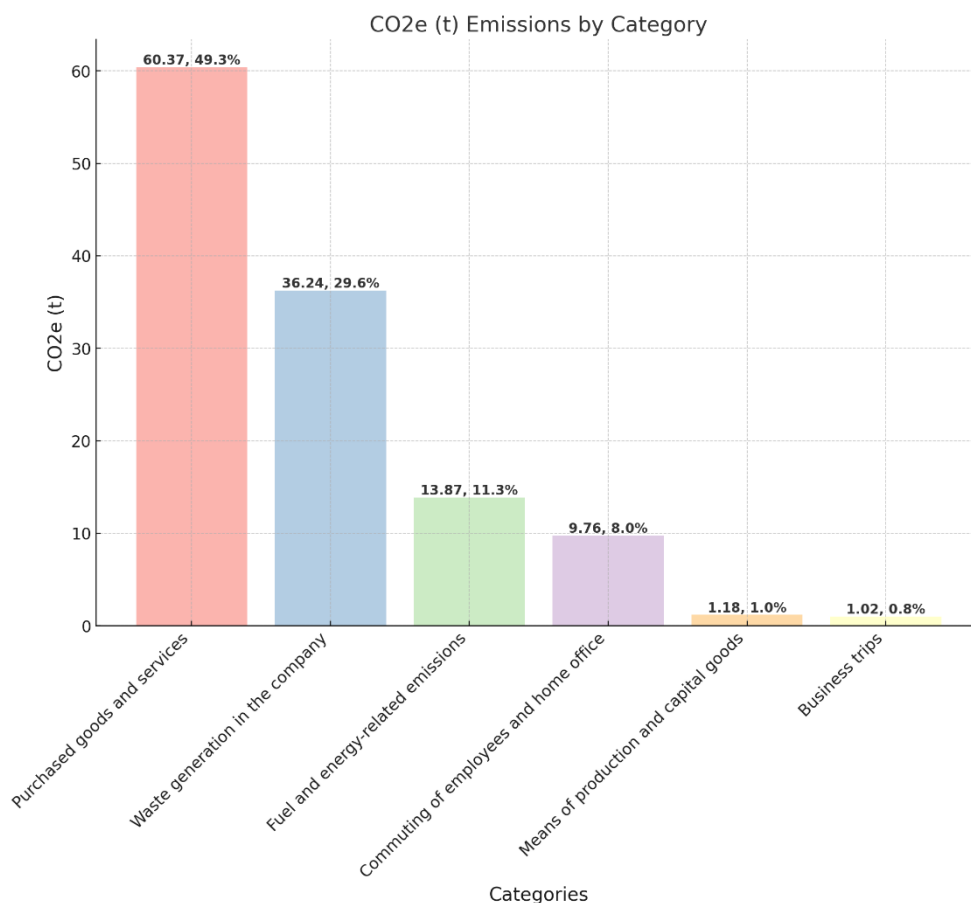
The carbon footprint report for the resort is outlined under the Greenhouse Gas (GHG) Protocol's three scopes, which detail the different types of emissions sources:

- **Scope 1 emissions** are the direct emissions that come from sources owned or controlled by the resort. In 2022, the resort's Scope 1 emissions amounted to **30,58 tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e)**. These direct emissions are primarily from combustion in heating systems and stem from the consumption of propane gas and wood pellets. Scope 1 emissions are also caused by company-owned vehicles, which primarily use diesel.
- **Scope 2 emissions** refer to indirect emissions from the generation of purchased electricity consumed by the resort. The resort recorded Scope 2 emissions of **24,41 tons of CO<sub>2</sub>e** for the year 2022. The emission factor for the calculation of electricity consumption was provided by the utility company Energias de Portugal (EdP). Using the data provided by EdP constitutes a market-based approach. Using a location-based approach, i.e. using the national grid emission factors or Portugal, would have resulted in a significantly higher emission due to electricity consumption (around 42 tons of CO<sub>2</sub>e). The calculation of the resort's carbon footprint in previous years was based on the location-based approach.
- **Scope 3 emissions** encompass all other indirect emissions that occur within the resort's value chain. This includes emissions from purchased goods and services – in particular food items, beverages and cleaning products –, business travel, waste disposal, the commuting of employees, and upstream energy-related emissions not included in Scope 1 or 2. In 2022, the resort's Scope 3 emissions were reported at **122,44 tons of CO<sub>2</sub>e**. Emissions for food items and beverages during 2022 were calculated in a very detailed way, collecting consumption data of individual items. Dishes served in the restaurant were calculated on the basis of actual ingredients. Emissions due to the consumption of foods and beverages were based on estimated guest numbers in previous years.

It is noteworthy that the predominant portion of the resort's total emissions are from Scope 3, which includes a variety of activities that are challenging to measure and manage. Quite some time and effort was 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 with reasonable effort.



Taking a closer look at the individual Scope 3 emission categories of the resort:



**Chart 3:** Individual Scope 3 emissions in total amounts (CO<sub>2</sub>e (t)) and in percentage terms of total Scope 3 emissions in the year 2022.

- **Purchased Goods and Services** (60,37 tons of CO<sub>2</sub>e): This category is the most significant contributor to the resort's Scope 3 footprint, accounting for the majority of emissions. It includes emissions from the lifecycle of goods and services used at the resort, such as food and beverages as well as cleaning products.
- **Waste Generation** in the Resort (36,24 tons of CO<sub>2</sub>e): The emissions from waste management are a smaller but impactful part of the footprint. This accounts for the disposal and treatment of waste produced by the resort, with residual waste being a notable contributor to this category. Waste volumes in 2022 were inflated by a thorough waste sweep of the resort's premises, which is not conducted every year.



- **Fuel and Energy-related Emissions** (13,87 tons of CO<sub>2</sub>e): This includes emissions associated with the production and transportation of fuels and energy that the resort purchases.
- **Commuting of Employees and Home Office** (9,76 tons of CO<sub>2</sub>e): The commuting practices of the resort's staff, along with emissions from home office activities, make up a modest portion of the Scope 3 emissions.
- **Means of Production and Capital Goods** (1,18 tons of CO<sub>2</sub>e): This category, while relatively small, includes emissions related to the acquisition of office goods necessary for the resort's operations.
- **Business Trips** (1,02 tons of CO<sub>2</sub>e): Business travel accounts for a minimal impact on the resort's Scope 3 emissions, reflecting efficient travel management and limited travel activity.





IV. Results over time

The carbon footprint of the resort was calculated for the three consecutive calendar years 2022, 2021 and 2020. From 2020 to 2021, the total emissions increased from 151,18 tons to 178,09 tons. This is an absolute increase of 26,91 tons (17,8%).

From 2021 to 2022, the total emissions slightly decreased from 178,09 tons to 177,43 tons. The absolute decrease is 0,66 tons (- 0,37%).

In summary, there was a significant increase in total emissions from 2020 to 2021, followed by a marginal decrease from 2021 to 2022. Despite the slight decrease in the most recent year, the total emissions in 2022 are still notably higher than in 2020 by 26,25 tons.

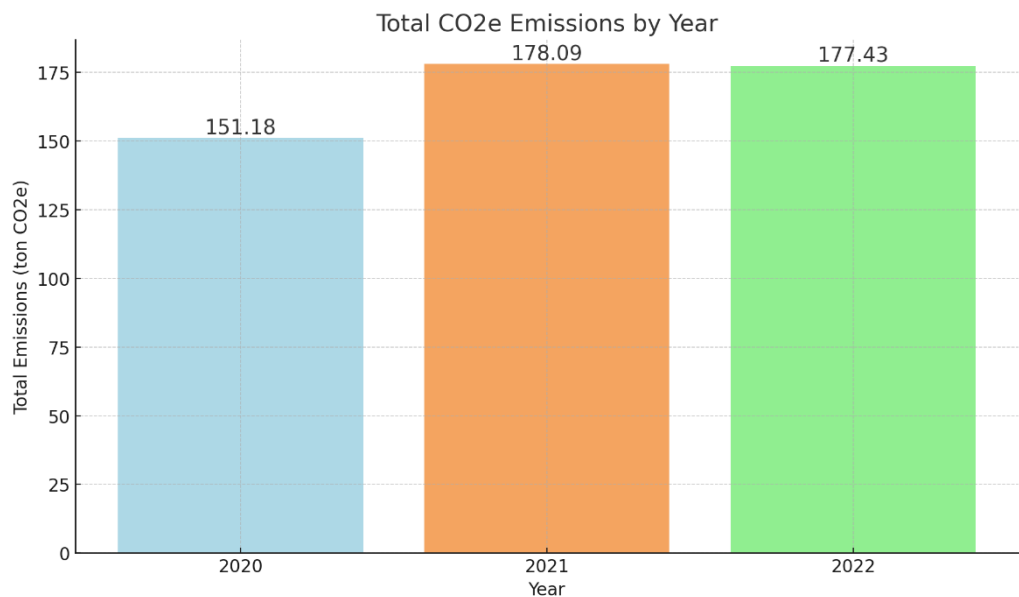


Chart 4: Total CO<sub>2</sub>e emissions of the resort during 2020, 2021, and 2022.



Looking at the development of individuals scopes:

	2020	2021	2022
Scope 1	12,28	17,46	30,58
Scope 2	41,47	39,75	24,41
Scope 3	97,43	120,88	122,44
Total (tons of CO <sub>2</sub> e)	151,18	178,09	177,43

- **Scope 1 Emissions** have increased each year. From 2020 to 2021, there was an increase of 5,18 tons, from 2021 to 2022, the increase was more significant, amounting to 13,12 tons, which is a 75,20% rise, on the back of a significant consumption of propane gas in 2022. Overall, from 2020 to 2022, Scope 1 emissions increased by 18,30 tons.
- **Scope 2 Emissions** have seen a decrease over time. From 2020 to 2021, emissions decreased by 1,72 tons. From 2021 to 2022, the decrease was more dramatic, with a reduction of 15,34 tons. It should be noted however, that the electricity consumption of the resort increased significantly from year to year. At the same time the emissions per kWh in the national grid of Portugal decreased, which resulted in lower indirect electricity-emissions. Also, the switch to a market-based approach for 2022, using emission data provided by EdP, has further reduced Scope 2 emissions in that year. EdP reported a significantly lower emission factor than the national grid's emission factor would have been. Over the three years, Scope 2 emissions have decreased by 17,06 tons, a total reduction of 41,16%.
- **Scope 3 Emissions** have shown a general increase. From 2020 to 2021, there was an increase of 23,45 tons. From 2021 to 2022, the increase was smaller, at 1,56 tons. Emissions due to food items and drinks were the largest category of emissions in every year. In 2022, the more detailed calculation of emissions based on individual items, rather than using estimates based on the number of restaurant guests in 2021 and 2020 had resulted in a decrease in food emissions in 2022. This was offset by an increase in emissions due to waste management, as a general clean-up of the resort has added to waste quantities in 2022.

From 2020 to 2022, the total increase in Scope 3 emissions was 25,01 tons, a 25,67% rise. It should be noted, that the number of overnight guest staying at the resort has also increased during this period.

	2020	2021	2022
Overnight stays	45.906	60.365	86.190
Emission per overnight stay (kg)	3,29	2,95	2,06

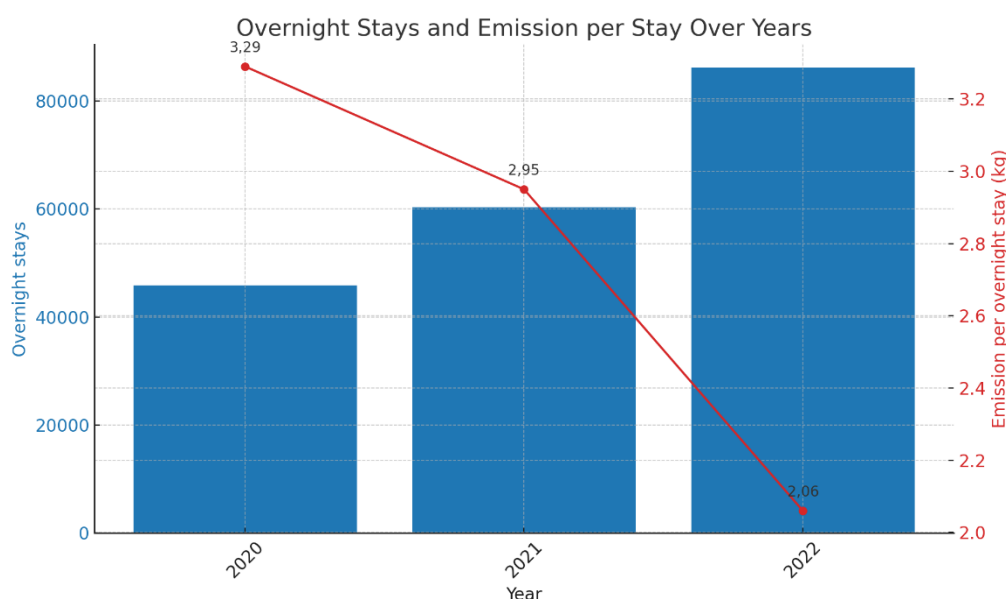


Between 2020 and 2021, the number of overnight guests increased by 14.459, a 31,5% rise from the previous year's figure of 45.906. During this interval, there was a decrease in emissions per overnight stay by 0,34 kg to **2,95 kg** from the **3,29 kg** recorded in 2020.

From 2021 to 2022, the overnight guests saw a further rise of 25.825, marking a 42,8% increase from the 60.365 recorded in 2021. Concurrently, the emissions per overnight stay continued to decline, falling by 0,89 kg or 30,2% to **2,06 kg** from the 2,95 kg seen in 2021.

Over the entire span from 2020 to 2022, there was an aggregate growth in overnight guests of 40.284, which is an overall increase of 87,8% from the original count. In tandem, emissions per overnight guest fell by a total of 1,23 kg, equating to a significant overall decrease of 37,4% from the initial measurement.

This dual trend illustrates that the resort does not only attract more guests year after year but is also becoming increasingly carbon-efficient.



**Chart 5:** The bar graph shows the number of overnight guests, while the line graph indicates the emissions per guest in kilograms of CO<sub>2</sub> equivalent. The data illustrates that while the number of overnight guests increased significantly from 2020 to 2022, the emissions per overnight guest decreased, denoting an improvement in emissions efficiency per overnight guest.



## V. Overall results table

Scope 1		
Relevant	Description of scope	CO <sub>2</sub> e(t)
x	1.1 (Direct emissions from combustion processes in stationary plants)	25,42
x	1.2 (Direct emissions from combustion processes in mobile systems)	5,16
x	1.3 (Direct emissions of volatile gases)	0,00
x	1.4 (Direct emissions from processes)	0,00
<b>Total Scope 1</b>		<b>30,58</b>

Scope 2		
		CO <sub>2</sub> e(t)
x	2.1 (Indirect emissions from purchased electricity)	24,41
	2.2 (Indirect emissions from district heating / cooling)	
	2.3 (Indirect emissions from purchased steam)	
<b>Total Scope 2</b>		<b>24,41</b>

Scope 3		
		CO <sub>2</sub> e(t)
x	3.1 (Purchased goods and services)	60,37
x	3.2 (Means of production and capital goods)	1,18
x	3.3 (Fuel and energy-related emissions)	13,87
x	3.4 (Upstream transport and distribution)	0,00
x	3.5 (Waste generation in the company, water)	36,24
x	3.6 (Business trips)	1,02
x	3.7 (Commuting of employees and home office)	9,76
	3.8 (Leased items in the upstream value chain)	
	3.9 (Downstream transport and distribution)	
	3.10 (Processing of sold intermediate products)	
	3.11 (Use of sold products)	
	3.12 (Disposal of sold products)	
	3.13 (Leased items in the downstream value chain)	
	3.14 (Franchises)	
	3.15 (Investments)	
<b>Total Scope 3</b>		<b>122,44</b>

**Total 177,43**



## VI. Detailed results tables

General information		
Number of employees	32	Average for reference period
Number of overnight guests	86.190	
Number of rooms	78	
Number of tent sites	110	
Number of company vehicles	7	4 buggies, 2 vans, 1 tractor

### Scope 1

1.1 Direct emissions from combustion processes in stationary plants					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Propane gas	8.457	kg	2,9976	DEFRA 2023	25,35
Wood pellets	1.335	kg	0,0516	DEFRA 2023	0,07
					25,42

1.2 Direct emissions from combustion processes in mobile systems					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Petrol	24	l	2,0975	DEFRA 2023 (petrol, average biofuel blend)	0,05
Diesel	2.033	l	2,5121	DEFRA 2023 (diesel, average biofuel blend)	5,11
					5,16

1.3 Direct emissions of volatile gases					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
< other >	0				0,00
					0,00



Emissions from volatile gases are in principle relevant to the company's business model. This would include emissions due to a potential gas leak from an air conditioning system. However there was not leakage of volatile gas from any air conditioning system in 2022.

1.4 Direct emissions from processes - own green energy production					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
< other >	0	kWh	0,0000		0,00
					0,00

Emissions from processes are in principle relevant to the company's business model. This would include direct emissions due to own energy production, which was however not the case in 2022.

## Scope 2

2.1 Indirect emissions from purchased electricity					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Normal electricity, purchased	244.117	kWh	0,1730	EEA (European Environment Agency) 2022	42,23
Normal electricity, purchased	244.117	kWh		Energias de Portugal (EdP)	24,41
					24,41

The company purchased green electricity as per an agreement with electricity provider EdP. For the reference period, the utility company provided a customer-specific reporting of CO<sub>2</sub>e emissions associated with the resort's electricity consumption. The reported emissions were used in this calculation (market-based approach).

EdP's implicit emission factor is significantly lower than the emission factor for the national grid in Portugal. To put this in perspective: the resort's electricity consumption in 2022 would have resulted in emissions of approximately 42 tons of CO<sub>2</sub>e using a location-based approach in the calculation, i.e. applying the Portuguese grid emission factor.



## Scope 3

3.1 Purchased goods: food items and beverages						
Type	Weight per unit	Units sold	Weight (kg)	EF (unit sold)	EF (kg)	CO <sub>2</sub> e (t)
Beer 0,33l	0,33	8884	2.931,72		1,1194	3,28
Coffee/Milk (simple coffee, simple milk, milk with chocolate, cappuccino, etc)	0,2	14736	2.947,20		0,4980	1,47
Tea (local, no package)	0,2	413	82,60		0,0392	0,00
spiritual drinks (Porto, caipirinha, mojito, aperol, gin, vodka, adega velha, whisky, liquor, medronho)	0,05	534	26,70		1,0331	0,03
Bottle of wine/sangria/sparkling wine	0,75	454	340,50		1,2141	0,41
Natural juices 0,25l (orange, lemon, juice of the day)	0,25	7877	1.969,25		0,718	1,41
Wine glas	0,25	2995	748,75		1,2141	0,91
Sparkling water	0,3	998	299,40		0,386	0,12
Kombucha	0,25	352	88,00		0,5112	0,04
Fish Toast	0,35	70	24,50		6,1896	0,15
Pancake fish	0,35	251	87,85		6,1896	0,54
Hamburger (bacon, cheese, simple, egg, mushroom, pumpkin)	0,4	261	104,40		17,0128	1,78
Chicken curry		1063		1,8880		2,01
Miscellaneous		2784		1,0682		2,97
Moussaka	0,4	1093	437,20		22,6254	9,89
Skewers	0,4	48	19,20		6,7131	0,13
tagliatelle	0,4	37	14,80		2,9376	0,04
Pappardelle	0,4	50	20,00		2,9376	0,06
Ham and cheese Croissant	0,35	333	116,55		4,1191	0,48
Pancake bacon egg	0,35	321	112,35		7,6994	0,87
Chorizo		7		1,1110		0,01
Toast Pork & Cheese	0,35	1589	556,15		4,1191	2,29
Margarita pizza		1330		0,9620		1,28
Nazari pizza		544		1,4160		0,77
Pepperoni pizza		711		1,2050		0,86
4 Cheese pizza		593		1,6160		0,96



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## Salema CCF vintage 2023

Hawaiian pizza		611		1,3740		0,84
Salami pizza		754		1,2050		0,91
Al Tono pizza		384		1,4020		0,54
Neapolitan pizza		489		1,1010		0,54
Al Funghi pizza		739		1,0010		0,74
Rustic pizza		601		1,2050		0,72
Calzone		599		1,3690		0,82
Shrimp pizza	0,65	286	185,90		2,4481	0,46
Algarve pizza		434		1,1210		0,49
Cheese board		241		0,7900		0,19
Las Vegas pizza		728		0,7120		0,52
Croissant (Butter / jam)	0,35	346	121,10		2,6009	0,31
Toast vegetarian (butter, honey, jam, cheese, peanut butter, mushroom egg, goat cheese honey)	0,35	1106	387,10		1,4870	0,58
Pancake (Choco, banana, strawberry, honey, jam, nutty cottage cheese)	0,35	937	327,95		2,2725	0,75
Vegan Poke Bowl		1224		0,6600		0,81
Brunch		617		2,1000		1,30
Cakes (pastry, cake of the day, almond pie)	0,35	3887	1.360,45		2,2725	3,09
Humus	0,35	57	19,95		0,9515	0,02
Greek salad		1041		0,5520	5,0749	0,57
Icecream boll	0,2	1763	352,60		1,7367	0,61
Scrambled eggs	0,35	332	116,20		4,5195	0,53
Brian	0,4	474	189,60		1,5965	0,30
Soup of the day		2040		0,1100		0,22
Vegetarian curry		780		0,3520		0,27
Stuffed eggplant	0,4	110	44,00		1,5965	0,07
Moussaka vegan	0,4	525	210,00		1,5965	0,34
						49,29





Emission factors for food items and beverages are sourced from Agribalyse 3.1.1. Emission of dishes are calculated by AIM. Ingredients of dishes were provided by the resort's restaurant Nazari. Emissions for miscellaneous items were calculated using a resort-specific average emission factor.

3.1 Cleaning products and sanitary paper					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Washing powder, cleaning products	2.867	kg	3,4598	ecoinvent v3.9.1.	9,92
Tissues, toilet paper, napkins, bags	577	kg	1,8000	Global Climate	1,04
					10,96

3.1 Paper and printing consumables					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Brochure (plain paper)	7.633	pages	0,0146	ecoinvent v3.9.1.	0,11
Printing paper (normal paper)	15	kg	0,9405	ecoinvent v3.9.1.	0,01
					0,13

3.2 Office Equipment					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Laptop	2	unit	171,3600	ecoinvent v3.9.1	0,34
Stand PC	1	unit	224,4300	ecoinvent v3.9.1	0,22
Smart phone	3	unit	38,8786	ecoinvent v3.9.1	0,12
Monitor	1	unit	375,4100	GlobalClimate	0,38
					0,68

3.2 Machines and vehicles							
Type	Quantity	Useful life (years)	Weight per piece (kg)	Total weight (kg)	kg CO <sub>2</sub> e/ kg	Source	CO <sub>2</sub> e(t)
Golf cart	2	10	450	900	5,5	OIV, ADEME	0,50
							0,50



3.3 Heat consumption (upstream chain, well-to-tank (WTT))					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Propane	8.457	kg	0,3527	DEFRA 2023	2,98
Wood pellets	1.335	kg	0,1770	DEFRA 2023	0,24
					3,22

3.3 Fuel consumption (upstream chain, WTT)					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Petrol	24	l	0,5809	DEFRA 2023 (WTT petrol, average biofuel blend)	0,01
Diesel	2.033	l	0,6110	DEFRA 2023 (WTT diesel, average biofuel blend)	1,24
					1,26

3.3 Electricity (upstream chain, WTT)					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Electricity, purchased	244.117	kWh	0,0385	IEA (2023) Life Cycle Upstream Emission Factors: Portugal	9,40
					9,40

Scope 2 emissions associated with purchased electricity were calculated using emission data, provided by electricity utility EdP. While these numbers included some upstream emissions such as transport loss, it remained unclear whether reported emissions included all upstream electricity emissions. For that reason, upstream electricity emissions were included in Scope 3, using IEA data for the Portuguese national grid.

3.4 Upstream transport						
Type	Means of transport	Total distance (km)	Transport weight (tonne.km)	Emission factor	Source	CO <sub>2</sub> e(t)
Various						0,00
						0,00

Upstream Transport and Distribution (0,00 tons of CO<sub>2</sub>e): Emission in this category are relevant for the resort, however comprehensive data could not be collected with reasonable



effort. Upstream transport and distribution will be considered as a category in the next calculation of the companies carbon footprint. However, the impact of upstream transport emissions is estimated to be insignificant.

3.5 Waste					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Paper/cardboard/cardboard packaging	9.756	kg	0,0519	ecoinvent v3.9.1	0,51
Lightweight packaging/plastic	3.548	kg	0,4198	ecoinvent v3.7	1,49
Glass	12.607	kg	0,0299	ecoinvent v3.9.1	0,38
Residual waste	49.436	kg	0,5310	ecoinvent v3.9.1	26,25
					28,62

3.5 Water and waste water					
Type	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Fresh water	20.425	m3	0,1767	DEFRA 2023	3,61
Waste water	19.902	m3	0,2013	DEFRA 2023	4,01
					7,62

3.6 Business trips					
Means of transport	Total distance	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Aeroplane (long-haul)	3.200	km	0,2613	DEFRA 2023	0,84
Passenger car	1.060	km	0,1698	DEFRA 2023	0,18
Total					1,02

3.6 Hotel overnight stays					
Country	Quantity	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
< other >		Overnight stay			0,00
Total					0,00

Emissions from hotel overnight stays are relevant for the company's business model as part of business trips, however in 2022 there were no business-related overnight stays.



3.7 Commuting of employees					
Means of transport	Total distance	Unit	kg CO <sub>2</sub> e/ unit	Source	CO <sub>2</sub> e(t)
Lower medium car, Diesel	58.487	km	0,1435	DEFRA 2023	8,39
Electric car	5.793	km	0,0250	Global Climate/Fraunhofer Institute	0,14
Hybrid car	4.408	km	0,0930	Fraunhofer Institute	0,41
Public transport/bus	7.947	km	0,1022	DEFRA 2023	0,81
On foot, by bike	3.391	km	0,0000	DEFRA 2023	0,00
Total					9,76

3.7 Home office of employees					
Working days per year in home office		Unit	Country	MA in the home office	CO <sub>2</sub> e(t)
0					0
Total					0

Emissions due to employees working from home are in principle relevant to the company's business model, however there was no home office work in 2022.



AIM - Advice in Motion GmbH is a cooperation partner of the German Institute for Sustainable Development (Deutsches Institut für Nachhaltige Entwicklung e.V., DINE e.V.) at Heilbronn University.

DINE is the publisher of the sustainability label FairChoice, which focuses on the wine industry. The CO<sub>2</sub> footprint of a business is a component of the certification. AIM is one of the cooperation partners in calculating the CO<sub>2</sub> footprint of vineyards that apply for the certification.



AIM – Advice in Motion GmbH is a project partner of the Technical University of Bingen (TH Bingen).

The Technical University of Bingen, founded in 1897, is one of the oldest technical universities in Germany. AIM is a project partner in the research project: Operational Emissions Calculator for Viticulture / Tool for Analyzing Climate Impact along the Viticultural Value Chain (CO<sub>2</sub> Calculator Wine).

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