

2023 | Carbon Footprint 2023

Lago Levico Camping Village

Prepared in December 2024





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Executive Summary

CHAPTER 1



Executive Summary

CONTEXT

We are facing a climate emergency that threatens people and planet. The global scientific community has warned us that we are in the decade of action to address climate change in order to avoid catastrophic changes. Businesses have the opportunity to catalyse positive transformation and adopt practices that enable a more sustainable and equitable future. The first step to taking action is understanding current impacts. As such, Lago Levico Camping Village has used the Green Future Project Carbon tool to calculate its 2023 carbon footprint to understand impacts and to identify opportunities for Lago Levico Camping Village to take action on climate. This footprint reports emissions for "group Lago Levico Camping Village".

METHODOLOGY

The Greenhouse Gas Protocol was used as the carbon accounting framework to calculate carbon emissions across impact areas. The impact areas are categorised into the following scopes set out by the protocol:

SCOPE 1



Direct emissions
(e.g. natural gas, transport
fuels and more)

SCOPE 2



Indirect energy-related
emissions
(e.g. electricity, heat and
steam or cooling)

SCOPE 3



All other indirect emissions
(e.g. business travel,
procurement, staff
commuting, homeworking,
waste, water, and more)

Data has been converted into **Greenhouse Gas (GHG)** emissions using the below databases:

- UK Government, Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy.
- IPCC 2021 openLCA LCIA Methods 2.4.51
- IPCC 2021 openLCA LCIA Methods 2.4.29

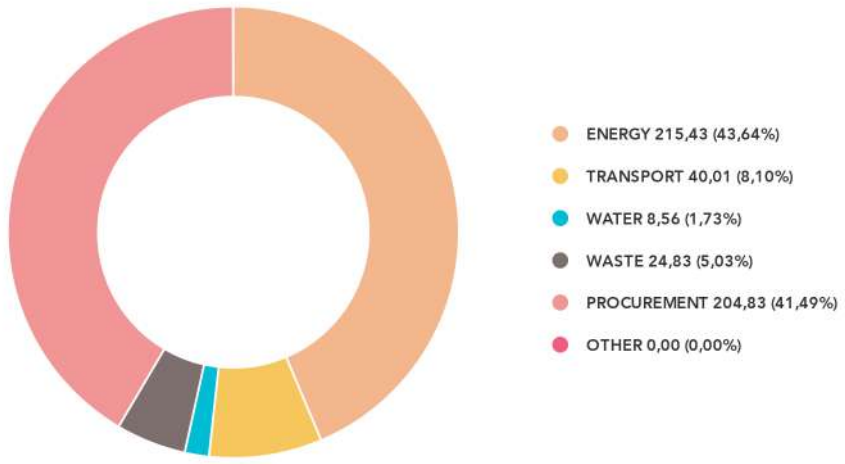
RESULTS BY IMPACT

The total emissions in 2023 were **493,7 tCO₂e**.

Total emissions were dominated by energy impact, which contributed **44,0% of the total footprint**. The table below shows emissions distributed across all the available impact areas for reporting. Notes on inclusions and exclusions are reported in the Methodology section.

Impact Area	Scope	Totals (tCO ₂ e)	%
Energy	1,2	215,43	43,64
Transport	1,3	40,01	8,10
Water	3	8,56	1,73
Waste	3	24,83	5,03
Procurement	3	204,83	41,49
Other		0,00	0,00
Total		493,66	100,00

TOTAL EMISSIONS 493,7 TCO2E



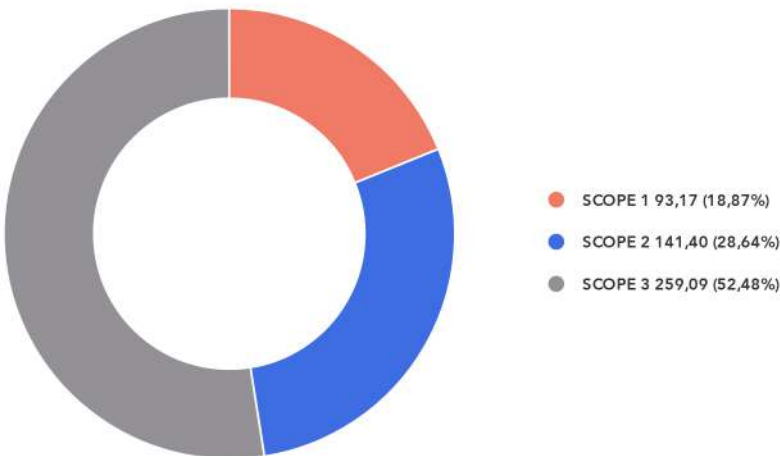
RESULTS BY SCOPE

The total emissions in 2023 were **493,7 tCO₂e**.

Total emissions were dominated by Scope 3, which contributed **52,5% of the total footprint**. The table below shows emissions distributed across all the available Scopes for reporting. Notes on inclusions and exclusions are reported in the Methodology section.

GHG Protocol Scope	Totals (tCO ₂ e)	%
Scope 1	93,17	18,87
Scope 2	141,40	28,64
Scope 3	259,09	52,48
Total	493,66	100,00

TOTAL EMISSIONS 493,7 TCO₂E



EXPERT INSIGHTS

Enhance your understanding with our 'Expert Insights' add-on feature. Our carbon specialists will provide personalized guidance to help you interpret your results, identify reduction opportunities, and implement sustainability practices in your business.

To request 'Expert Insights', simply click on the 'Ask the Expert' icon located in the 'Actions' column of your carbon footprint homepage.

PURCHASED ELECTRICITY LOCATION VS. MARKET BASED

Purchased electricity emissions can be measured using two methods: location-based and market-based. The location-based method reflects the average emissions intensity of the electricity grid in the region where it is consumed, highlighting the environmental impact of the local energy mix, such as coal, gas, or renewables. The market-based approach, however, focuses on the specific energy products a company buys, like renewable energy certificates (RECs) or power purchase agreements (PPAs). This allows businesses to report lower emissions by supporting cleaner energy, even if their local grid relies on fossil fuels. If you haven't provided any information on your tariffs, we will use the Residual Mix factor where available. This factor accounts for emissions after certificates, contracts, and supplier-specific factors are excluded, which might explain why your market-based emissions are higher than the location-based ones. When the Residual Mix is not available, we use a location-based emission factor.

Comparing both methods helps organisations better understand and manage their carbon impact.

Scope	Location (tCO ₂ e)	Market (tCO ₂ e)	% Difference
Scope 2	141,40	0,00	-100%

INTENSITY RATIOS

The total emissions in 2023 were **493,7 tCO₂e**.

Normalizing the data is useful because it facilitates:

- Comparison over time.
- Comparison across different organisation sectors and products.

This allows stakeholders to know how much environmental impact companies have relative to a given KPI, e.g. the amount of goods and/or services provided. Normalised data can be particularly helpful in demonstrating environmental improvements in a growing organisation.

The Lago Levico Camping Village uses the below intensity ratios for data normalisation:

Intensity Ratio	Reporting year (tCO ₂ e/intensity ratio)	Previous year (tCO ₂ e/intensity ratio)	Baseline year (tCO ₂ e/intensity ratio)
Emissions per 100 camping stays	0,28	Not Available	Not Available

Context

CHAPTER 2



Context

Lago Levico Camping Village has committed to doing its part to address the climate crisis. Using the Green Future Project Carbon tool, Lago Levico Camping Village has calculated its group carbon footprint for 2023 to understand its environmental impacts and identify opportunities for improvement.

COMPANY DESCRIPTION

Camping Levico specialises in the management and development of campsites and holiday villages, with a strong focus on sustainability and innovation. By creating unique experiences for families, it promotes open-air tourism, enhancing the natural and cultural heritage of the localities in which it operates.



REPORTING PERIOD

2023



REPORTING TYPE

Voluntary disclosure based on the Greenhouse Gas Protocol methodology.



DATA

Climate change

We are facing a climate emergency. Our planet is changing as a result of our reliance on fossil fuels like oil, gas, and coal as our primary energy sources. These fossil fuels emit greenhouse gases (GHG) (most notably, carbon dioxide (CO₂)) into our atmosphere and lead to warmer global temperatures. As a result we are witnessing an increase in natural disasters like droughts, flooding, and fires, all of which threaten human livelihoods. The international scientific community has warned us that we need to take significant action to halt and reverse climate change by 2030 in order to prevent catastrophic damage. In response, global initiatives including the United Nations Sustainable Development Goals and the 2015 Paris Climate Agreement aim to catalyse collaborative action to limit global warming to 1.5°C above pre-industrial levels while improving nature and social equity. With 2030 on the horizon, we are in the decade of action to tackle climate change. Companies such as Lago Levico Camping Village have the opportunity to be on the forefront of catalysing a transformation to sustainable and equitable economy.



Energy transition

Achieving net zero emissions is a crucial goal in combating climate change. "Net zero" refers to a government or company reducing greenhouse gas emissions as close as possible to zero and offsetting the remaining unavoidable emissions through projects that aim to absorb CO₂ out of the atmosphere

The key to achieving net zero is the decarbonisation of the energy sector. Since climate change is primarily caused by the emission of greenhouse gases from fossil fuels, there needs to be an energy transition from fossil fuel energy sources to renewable energy sources. These include solar, wind, and hydropower. Many countries are increasing the share of energy from renewable sources in their energy mix to reduce carbon emissions and promote environmental sustainability.



Businesses like Lago Levico Camping Village can contribute to the achievement of a net zero ambition through switching to renewable energy or going on a green tariff in order to increase demand for renewable

Scope 3 and green supply chains

This carbon footprint follows the Greenhouse Gas Protocol, the international standard for carbon accounting. The protocol categorises emissions into scopes.

- **Scope 1:** direct emissions (i.e., Natural gas, transport fuels, and etc.).
- **Scope 2:** indirect energy-related emissions (i.e., electricity, steam and cooling).
- **Scope 3:** all other indirect emissions (i.e., business travel, procurement, staff commuting, home working, water, and waste, etc.).



Very often a business's greatest impact is within its Scope 3 supply chain emissions. As these do not fall under the direct control of a business, the most effective way to make reductions is through engagement with suppliers.

For Lago Levico Camping Village this could include sharing this carbon footprint with suppliers to encourage them to measure their impacts, or developing sustainability criteria by which new suppliers are chosen.

Methodology

CHAPTER 3



Methodology

The methodology used to prepare the Lago Levico Camping Village's carbon footprint for 2023 was the Greenhouse Gas (GHG) Protocol. The Protocol is an international standard for companies to measure and report GHG emissions from their operations and value chains. It was developed through a **20+ year partnership** between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

UNDER THE PROTOCOL, GHG EMISSIONS ARE ORGANISED UNDER THREE SCOPES:

SCOPE 1	SCOPE 2	SCOPE 3
Direct emissions (e.g. natural gas, transport fuels and more)	Indirect energy-related emissions (e.g. electricity, heat and steam or cooling)	All other indirect emissions (e.g. business travel, procurement, staff commuting, homeworking, waste, water, and more)

UPSTREAM AND DOWNSTREAM EMISSIONS

Until recently, most companies have focused on measuring emissions from their own operations and electricity consumption. But what about all of the emissions a company is responsible for outside of its own walls — from the goods it purchases to the disposal of the products it sells? These fall within the Scope 3 category. The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard divides Scope 3 GHG emissions into Upstream and Downstream emissions. The distinction is based on the financial transactions of the reporting company.

- 1. Upstream emissions are indirect GHG emissions related to purchased or acquired goods and services.*
- 2. Downstream emissions are indirect GHG emissions related to sold goods and*

The table below reports the Scope 3 categories that Lago Levico Camping Village has included in this report.

Upstream and downstream	Scope 3 categories	Included
Upstream SCOPE 3 emissions	1. Purchased goods & services	✓
	2. Capital goods	
	3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	
	4. Upstream transportation and distribution	✓
	5. Waste generated in operations	✓
	6. Business travel	✓
	7. Employee commuting & home working	✓
	8. Upstream leased assets	
Downstream SCOPE 3 emissions	10. Processing of sold products	
	11. Use of sold products	
	12. End-of-life treatment of sold products	
	13. Downstream leased assets	
	14. Franchises	
	15. Investments	
	9. Downstream transportation and distribution	

OUT OF SCOPE

The following areas **do not currently form** part of the Lago Levico Camping Village's reporting.

The rationale behind their exclusion is provided here:

Within the report, Scope 3 categories 3.8 (Upstream Leased Assets) to 3.15 (Investments) were not considered, as they are not applicable.

EMISSION CONVERSION FACTORS

Input data has been converted into GHG emissions (measured as metric tonnes of carbon dioxide equivalent) using the below databases:

- UK Government, Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy.
- IPCC 2021 openLCA LCIA Methods 2.4.51
- IPCC 2021 openLCA LCIA Methods 2.4.29
- UK Government Department for Environment, Food & Rural Affairs and Leeds University, UK Footprint Results (1990 - 2021).
- Association of Issuing Bodies (AIB). 2023 European Residual Mix (version 1.0)

Results

CHAPTER 4



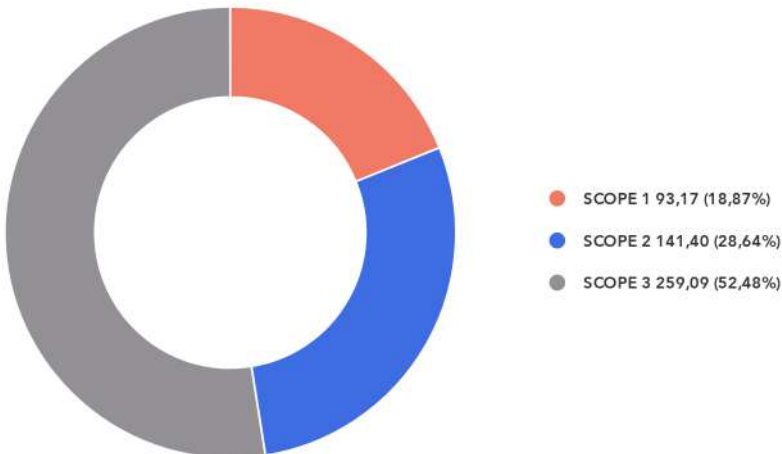
Total results

The total emissions in 2023 were **493,7 tCO₂e**.

Total emissions by scope are shown below.

Scope	Emissions (tCO ₂ e)	%
Scope 1	93,17	18,87
Scope 2	141,40	28,64
Scope 3	259,09	52,48
Total	493,66	100,00

TOTAL RESULTS BY SCOPE 493,7 TCO₂E



Emissions were dominated by **Scope 3**, which accounted for 52,5% of the total footprint. Scope 3 includes all other indirect emissions (e.g. business travel, procurement, staff commuting, homeworking, waste, water, and more).

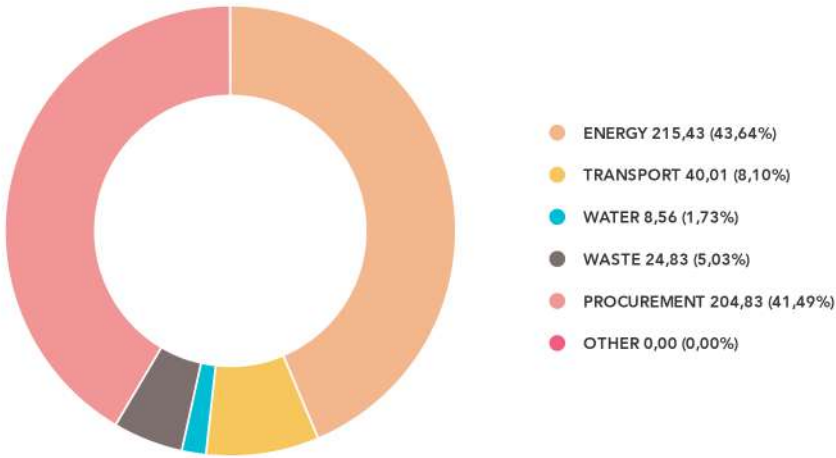
Scopes Scope 2 and Scope 1 were a relatively small portion of the total footprint and are concerned with indirect energy-related emissions (e.g. electricity, heat and steam or cooling) and direct emissions (e.g. natural gas, transport fuels and more).'

Total emissions by impact area are shown below.

Impact Area	Scope	Totals (tCO2e)	%
Energy	1,2	215,43	43,64
Transport	1,3	40,01	8,10
Water	3	8,56	1,73
Waste	3	24,83	5,03
Procurement	3	204,83	41,49
Other		0,00	0,00
Total		493,66	100,00

Emissions are dominated by energy which contribute **43,6% of the total**.

TOTAL RESULTS BY IMPACT AREA 493,7 TCO2E



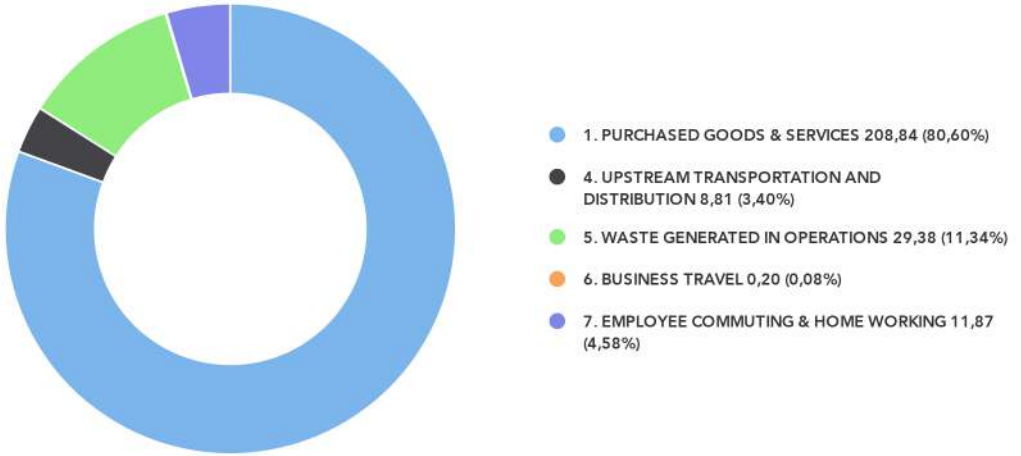
Scope 3 by GHG Protocol categories

1. Purchased goods & services accounted for the greatest impact on total Scope 3 emissions at **80.6%**. This was followed by 5. Waste generated in operations (11.34%) and 7. Employee commuting & home working (4.58%).

The total emissions from Scope 3 in 2023 were **259,09 tCO₂e**.

Scope 3 GHGP category	Emissions (tCO ₂ e)	%
1. Purchased goods & services	208,84	80,60
4. Upstream transportation and distribution	8,81	3,40
5. Waste generated in operations	29,38	11,34
6. Business travel	0,20	0,08
7. Employee commuting & home working	11,87	4,58
Total	259,09	100,00

TOTAL SCOPE 3 EMISSIONS 259,09 TCO2E



Energy

Total emissions from energy in year 2023 were 215,4 tCO₂e.

These emissions refer to GHG Protocol:

- Scope 1
- Scope 2

Emissions from energy accounted for 43,6% of Lago Levico Camping Village's total carbon footprint.



RESULTS

Scope	Emissions (tCO ₂ e)	%
Scope 2	141,40	65,63
Scope 1	74,04	34,37
Total	215,43	100,00

TOTAL ENERGY EMISSIONS 215,4 TCO2E



PURCHASED ELECTRICITY LOCATION VS. MARKET BASED

Purchased electricity emissions can be measured using two methods: location-based and market-based. The location-based method reflects the average emissions intensity of the electricity grid in the region where it is consumed, highlighting the environmental impact of the local energy mix, such as coal, gas, or renewables. The market-based approach, however, focuses on the specific energy products a company buys, like renewable energy certificates (RECs) or power purchase agreements (PPAs). This allows businesses to report lower emissions by supporting cleaner energy, even if their local grid relies on fossil fuels. If you haven't provided any information on your tariffs, we will use the Residual Mix factor where available. This factor accounts for emissions after certificates, contracts, and supplier-specific factors are excluded, which might explain why your market-based emissions are higher than the location-based ones. When the Residual Mix is not available, we use a location-based emission factor.

Comparing both methods helps organisations better understand and manage their carbon impact.

Scope	Location (tCO2e)	Market (tCO2e)	% Difference
Scope 2	141,40	0,00	-100%

PURCHASED ELECTRICITY LOCATION VS. MARKET BASED

tCO₂e

150

100

50

0

141,40

0,00

2023

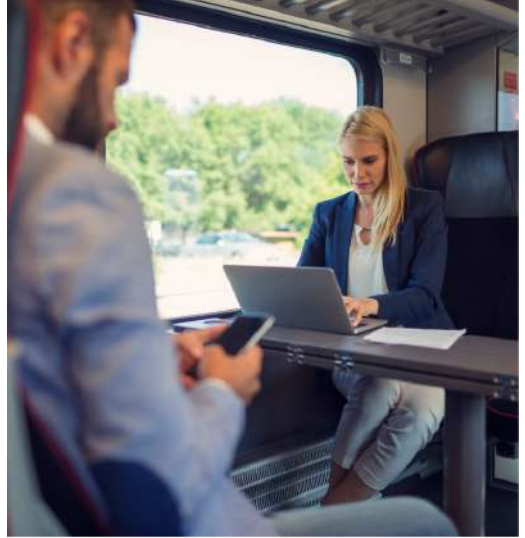
● Location based ● Market based

Transport

Total emissions from transport in year 2023 were 40,01 tCO₂e.

These emissions refer to GHG Protocol:

- Scope 1
- 6. Business travel
- 7. Employee commuting & home working
- 4. Upstream transportation and distribution

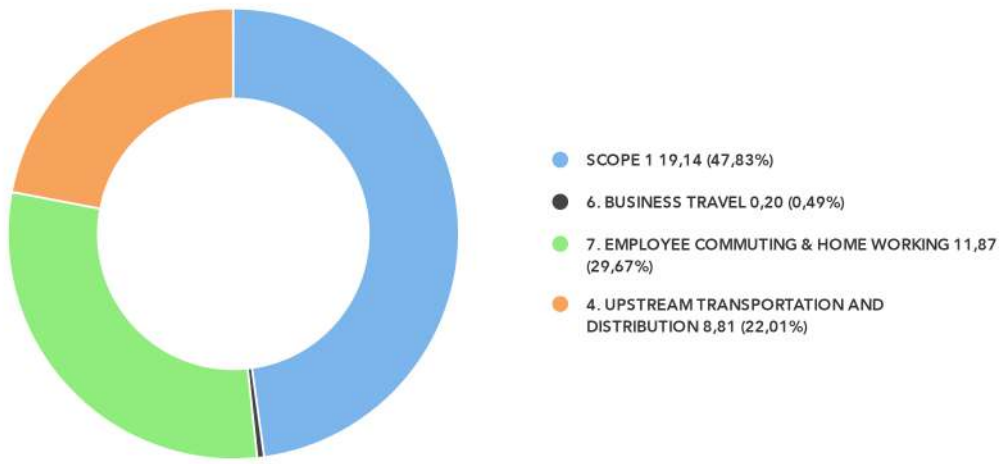


Emissions from transport accounted for 8,1% of Lago Levico Camping Village's total carbon footprint.

RESULTS

GHGP category	Emissions (tCO ₂ e)	%
Scope 1	19,14	47,83
6. Business travel	0,20	0,49
7. Employee commuting & home working	11,87	29,67
4. Upstream transportation and distribution	8,81	22,01
Total	40,01	100,00

TOTAL TRANSPORT EMISSIONS 40,01 TCO2E



Water

Total emissions from water in year 2023 were 8,56 tCO₂e.

These emissions refer to GHG Protocol:

- 1. Purchased goods & services
- 5. Waste generated in operations

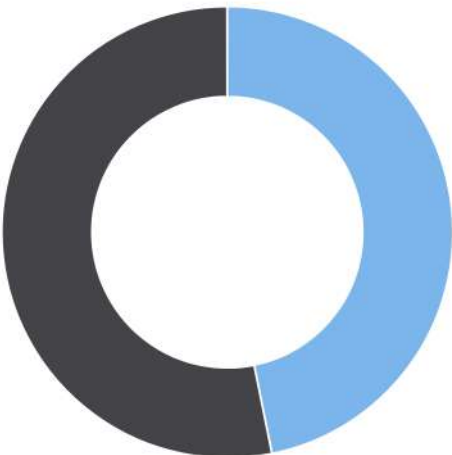
Emissions from Water accounted for 1,6% of Lago Levico Camping Village's total carbon footprint.



RESULTS

GHGP category	Emissions (tCO ₂ e)	%
1. Purchased goods & services	4,01	46,83
5. Waste generated in operations	4,55	53,17
Total	8,56	100,00

TOTAL WATER EMISSIONS 8,56 TCO2E



- 1. PURCHASED GOODS & SERVICES 4,01 (46,83%)
- 5. WASTE GENERATED IN OPERATIONS 4,55 (53,17%)

Waste

Total emissions from waste in year 2023 were 24,83 tCO₂e.

These emissions refer to GHG Protocol:

- 5. Waste generated in operations

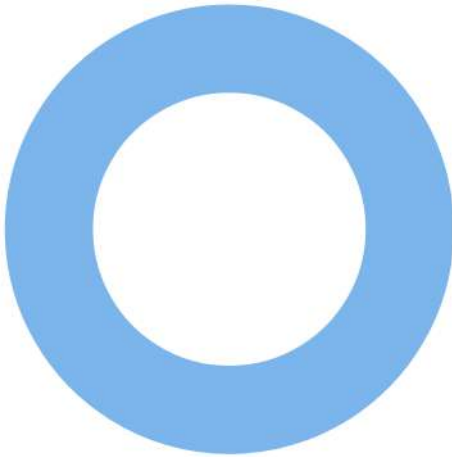
Emissions from Waste accounted for 4,9% of Lago Levico Camping Village's total carbon footprint.



RESULTS

GHGP category	Emissions (tCO ₂ e)	%
5. Waste generated in operations	24,83	100,00
Total	24,83	100,00

TOTAL WASTE EMISSIONS 24,83 TCO2E



● 5. WASTE GENERATED IN OPERATIONS 24,83
(100,00%)

METHODOLOGY

or all waste except special waste, it was possible to collect disposal data in cubic meters, rather than in mass units. To obtain a weight value, sources such as ARPA and AMA were sought for the average density of each category. The value was then multiplied by the volume, obtaining the weight.

Procurement

Total emissions from procurement in year 2023 were 204,83 tCO₂e.

These emissions refer to GHG Protocol:

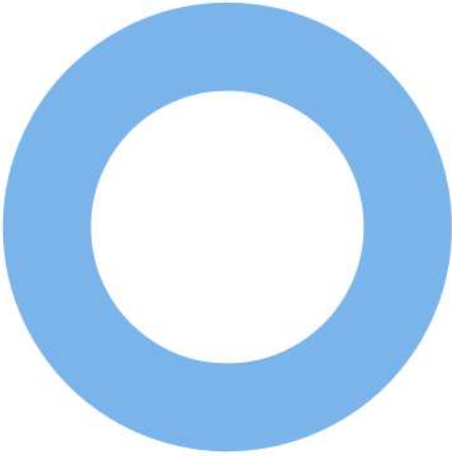
- 1. Purchased goods & services

Emissions from Procurement accounted for 41,3% of Lago Levico Camping Village's total carbon footprint.

RESULTS BY SCOPE 3 GHGP CATEGORY

GHGP category	Emissions (tCO ₂ e)	%
1. Purchased goods & services	204,83	100,00
Total	204,83	100,00

TOTAL PROCUREMENT EMISSIONS BY SCOPE 3 GHGP CATEGORY 204,83 TCO2E

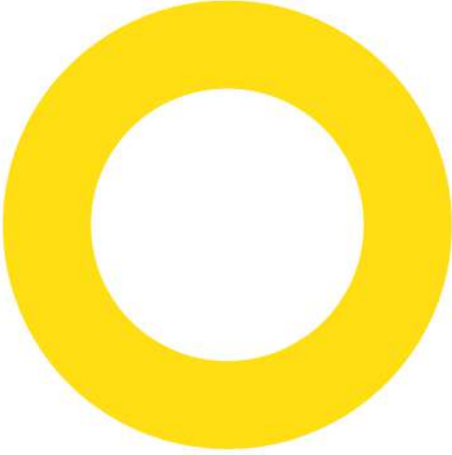


● 1. PURCHASED GOODS & SERVICES 204,83 (100,00%)

RESULTS BY SIMPLIFIED CATEGORY

GHGP category	Emissions (tCO2e)	%
Manufacturing	204,83	100,00
Total	204,83	100,00

TOTAL PROCUREMENT EMISSIONS BY CATEGORY 204,83 TCO2E



● MANUFACTURING 204,83 (100,00%)

Other

Total emissions from other in year 2023 were 0,00 tCO2e.

These emissions refer to GHG Protocol:

Emissions from Other accounted for 0,0% of Lago Levico Camping Village's total carbon footprint.



RESULTS

GHGP category	Emissions (tCO2e)	%
Total	0,00	100,00

Summary & What's next

CHAPTER 5



Conclusions

Global records highlight a worrying increase in greenhouse gas emissions over the past decade, driven mainly by industrial activities, transportation, and energy production. Current mitigation efforts are insufficient to meet international **climate targets**, posing serious risks to environmental and human health.

To combat this, we need more aggressive measures, such as increased investment in renewable energy, improved energy efficiency, and sustainable practices. Global cooperation and policy alignment are essential, alongside public awareness and engagement to drive necessary changes. While the challenge is significant, it also presents an opportunity for transformative action. By committing to **ambitious goals and leveraging new technologies**, we can reduce emissions and ensure a sustainable future for generations to come.

We commend your commitment to sustainability and encourage you to **begin implementing the recommended actions** in the next section.



Recommendations for next steps

This report provides an understanding of the Lago Levico Camping Village emissions impact for the year 2023, and the progress made from the baseline and previous year measurements where applicable. We provide below insights and recommendations based on the findings.

EXPERT INSIGHTS

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GREEN FUTURE PROJECT

About

THE 360° ESG SOLUTION FOR YOUR NET ZERO JOURNEY

Green Future Project (GFP) is a climate tech Benefit company, B Corp, and RINA-certified digital partner aiming to support companies on their decarbonisation journey through a single platform. Businesses can optimise utilities, measure their carbon footprint, offset emissions with carbon credits, and invest in environmental projects via e-commerce and other solutions.

Green Future Project's technology enables companies to monitor their positive climate impact in real time, track projects with geospatial data, and transparently report results. The platform also supports businesses in communicating sustainability efforts and engage with stakeholders. The advisory team also offers ESG consulting.

With headquarters in Milan and Trento and an office in Abu Dhabi, GFP operates globally. In 2023, it partnered with Itochu Fashion System to help Japanese companies to achieve Net Zero.

[GREENFUTUREPROJECT.COM](https://www.greenfutureproject.com)