



GREENHOUSE GAS REPORT

2022 - 2023

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Legal information

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Our Milestones for Sustainability

As part of its strategy for greater sustainability, Kerschgens has been collaborating with the Berlin startup Numcamp since early 2022. Numcamp has launched a new app for **energy and climate management**. The goal is to identify concrete potential savings in fossil fuel consumption within existing operational processes and to verify the effectiveness of the implemented measures.

One of the largest projects successfully implemented was the installation of **photovoltaic (PV) systems** on the roofs of the company's halls in Stolberg. In the first phase, 1,500 square meters of roof space were equipped with solar panels. By switching to solar energy, Kerschgens saved 137 tons of CO₂ in 2022, covering 17.6% of its annual electricity consumption through sustainable sources. The continued expansion of PV systems will allow up to 60% of the company's electricity needs to be met through solar power in the future. Additionally, selected **roof surfaces** were greened to further optimize energy efficiency.

Our efforts have not gone unnoticed: In September 2022, Kerschgens was awarded the **Sustainability Prize** by PHOENIX, the steel trading group of Nordwest Handel AG. The selection criteria included strategic relevance, transparency of presented benefits, and measurability of objectives.

Another milestone on our path to sustainability is our **electromobility concept**. The company's fleet has been converted to battery-electric vehicles, Charging stations have been installed at parking lots in Stolberg, E-bike leasing has been introduced for

employees, promoting eco-friendly commuting both for work and personal use.

Since September 2023, Kerschgens has been using a 1,000 kWh **large-scale energy storage system** in collaboration with Voltfang. Instead of new battery modules, the system utilizes recertified batteries from the automotive industry, reducing waste and minimizing raw material consumption. The storage system has a lifespan of up to 10,000 charge cycles and helps balance peak loads while ensuring a reliable power supply. As a result, the company's self-consumption of generated energy has increased by 169,000 kWh annually, with the goal of boosting the share of green energy from photovoltaic systems from 60% to 80%—a significant reduction in CO₂ emissions.

We support the **Paris Climate Agreement** and have set the goal of reducing CCO₂ emissions by at least 25% by 2030. By this time, 60% of our electricity demand should be covered by solar energy. The base year for this goal is 2020, and our Scope 1, 2, and 3 emissions are detailed in this report. To ensure transparency and credibility in our emissions reduction efforts, Kerschgens has joined the renowned **Science Based Targets initiative (SBTi)**. As of July 20, 2022, SBTi had validated and published the commitments of more than 3,300 companies from over 70 countries.

As a partner of the Grünen Talachse, we are also committed to the sustainable future of Stolberg.



BATTERY STORAGE

169.000 kWh/year increase in self-consumption



SOLAR POWER SYSTEM

1.500 m² roof area with PV panels

ENERGY- AND CLIMATE-MANAGEMENT

25 tons of CO₂ saved



ELECTRO-MOBILITY

Charging station
Electric cars
E-bikes



1. Background Information

The greenhouse gas emissions of Kerschgens Werkstoffe & Mehr GmbH (hereinafter referred to as Kerschgens) have been calculated in accordance with the Greenhouse Gas Protocol Standard. The accounting of Scope 1, 2, and 3 emissions was conducted in-house following the GHG Protocol Corporate Accounting and Reporting Standard (ghgprotocol.org/corporate-standard). A separate document detailing the data collection methodology will be published.

1.1 Description of the Company and Objectives

Kerschgens Werkstoffe & Mehr GmbH is a family-owned company founded in 1876. It is a service provider offering a wide range of materials, including aluminum, reinforced concrete steel, stainless steel, perforated sheets, and more. With modern production facilities and a comprehensive range of services, Kerschgens primarily serves customers in the steel and metal construction, construction industry, mechanical engineering, and metalworking sectors. The company is headquartered in Stolberg (Rhineland) and operates three additional locations in Aachen, Bitburg, and Würselen, employing more than 200 employees.

As a regionally rooted family business, Kerschgens recognizes its social and ecological responsibility to operate sustainably. The 2021 flood disaster in the Ahr Valley and southwest North Rhine-Westphalia, which also affected the city of Stolberg, highlighted the importance of future-oriented action. For this reason, Kerschgens has set the goal of reducing its Scope 1 and 2 greenhouse gas emissions by at least 25% by 2030 compared to 2020 levels. The greenhouse gas balance provides a foundation for analyzing the current status of emissions, allowing the company to implement effective reduction measures.

1.2 Boundary Setting and Methodology

To assess greenhouse gas emissions, the analysis includes the entire Kerschgens Group, consisting of Kerschgens Werkstoffe & Mehr GmbH, Kerschgens Holding GmbH & Co. KG, and all company locations. The Scope 1 and 2 accounting includes all activities over which the company has operational control. This means that emissions from leased equipment are also included in the Scope 1 and 2 calculations. The base year for emissions reduction targets is 2020. Based on this, Kerschgens has committed to reducing Scope 1 and 2 emissions by 25% by 2030. In this report, emissions for 2022 and 2023 are also documented.

Categories Included in Scope 1:

- Liquefied petroleum gas (LPG)
- Heating oil
- Fuels (gasoline/diesel)
- Other gases

Categories Included in Scope 2:

- Electricity
- Natural gas

Because Kerschgens' products are used in diverse ways and their final application is not always traceable, the Scope 3 emissions accounting focuses solely on upstream activities (cradle-to-gate). Downstream emissions (gate-to-grave) have been excluded.

To avoid double counting, fuel- and energy-related emissions have not been included in Scope 3, as they are already accounted for in Scope 1 and 2.

The following categories are not included in the emissions balance because Kerschgens did not conduct activities in these areas during the reporting period: Franchises, Investments, Land-use change emissions, Biogenic emissions and removals.

All absolute results are rounded to one decimal place, and relative results are rounded to whole numbers for clarity.

The following categories were accounted for in Scope 3:

- Purchased goods and services
- Capital goods
- Upstream transportation and distribution
- Waste
- Business travel using third-party vehicles
- Employee commuting
- Rented or leased assets

The following categories were NOT accounted for in Scope 3:

- Fuel- and energy-related emissions (not included in Scope 1 or 2)
- Downstream transportation and distribution
- Processing of sold products
- Use of sold products
- End-of-life treatment of sold products
- Franchise
- Investments

2. Total Emissions

The total emissions for 2022 amounted to approximately 206,000 tons of CO₂ equivalent, while in 2023, total emissions were approximately 204,000 tons of CO₂ equivalent.

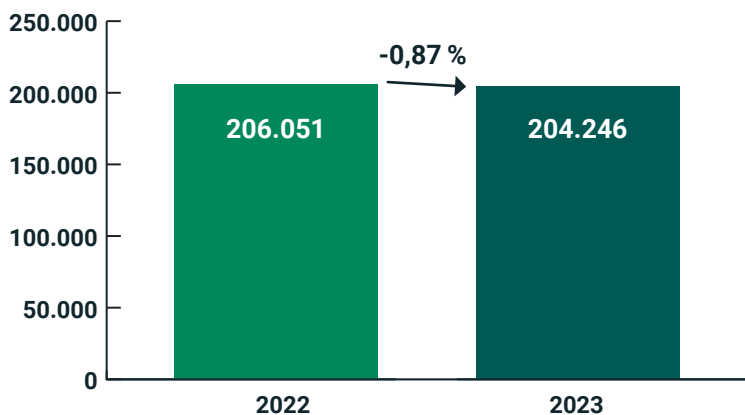
Table 1:
Total Emissions by Scope 1, 2, and 3 for 2022 and 2023 (in tons of CO₂ equivalent)

Scope	2022	2023
Scope 1	1.710	1.739
Scope 2	521	451
Scope 3	203.820	202.056
Total	206.051	204.246

Between 2022 and 2023, total emissions were reduced by approximately 1,800 tons (-0.87%).

The following page includes visual representations of total emissions:

Figure 1:
Comparison of Total Emissions for 2022 and 2023 in Tons of CO₂ Equivalent per Year



3. Accounting for Scope 1 and 2 Emissions

The total Scope 1 and 2 emissions in 2022 were approximately 2,234 tons of CO₂ equivalent, while in 2023, they slightly decreased to 2,195 tons of CO₂ equivalent.

Table 2:
Scope 1 and 2 Emissions for 2022 and 2023 (in tons of CO₂ equivalent)

Scope	2022	2023
Scope 1		
Liquefied petroleum gas (LPG)	126	144
Heating oil	26	26
Fuels (gasoline/diesel)	1.548	1.561
Other gases	10	9
Scope 2		
Electricity	481	400
Natural gas	39	35
Electricity from PV system	4	20
Summe (to CO₂-equivalent)	2.234	2.195

Total emissions for Scope 1 and 2 slightly decreased from 2022 to 2023.

The next page contains figures illustrating the total emissions for Scope 1 and 2.

Figure 2:
Total Scope 1 and 2 Emissions for 2022 and 2023 in Tons of CO₂ Equivalent

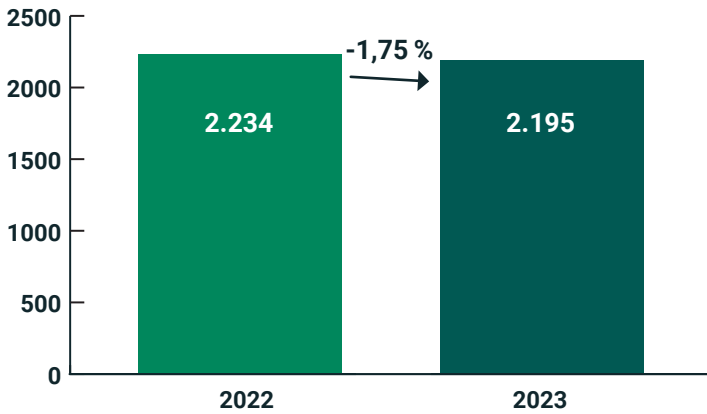
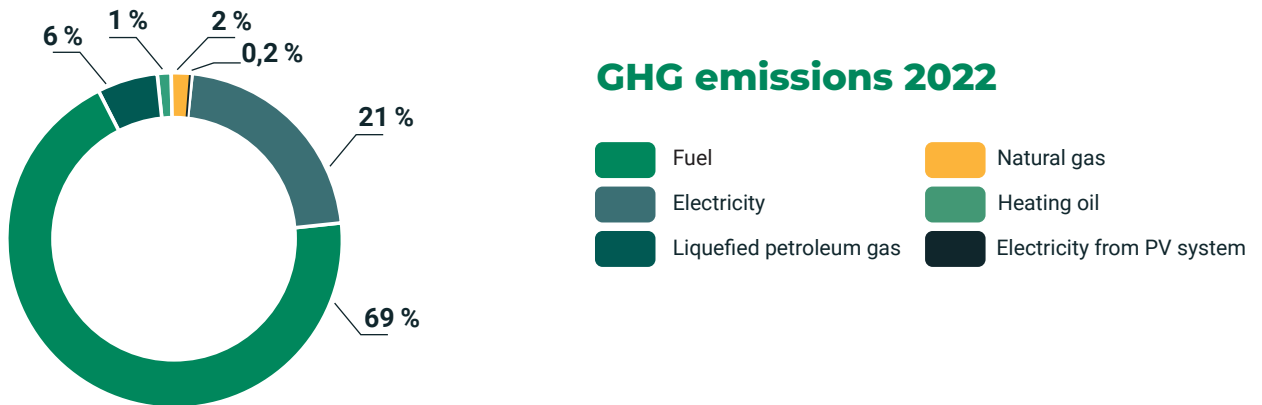
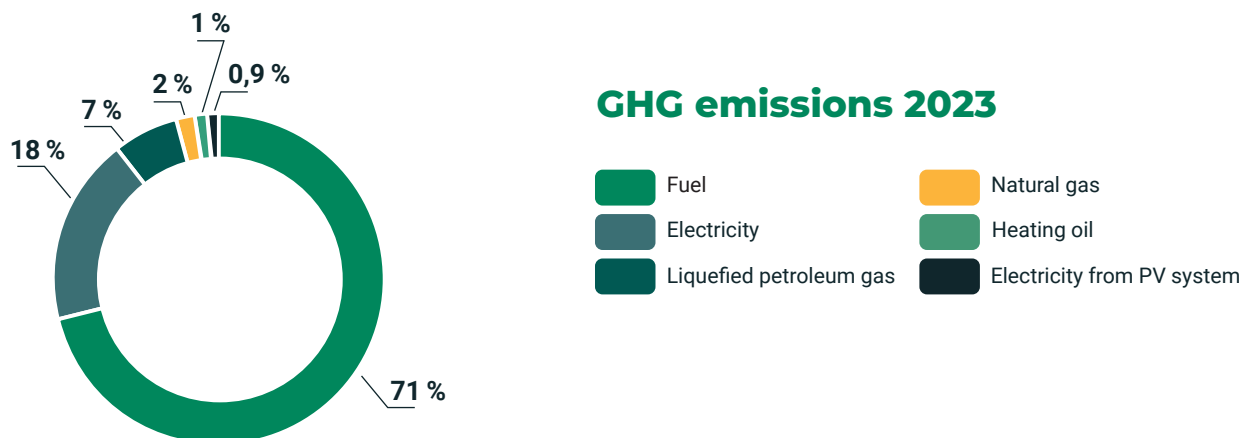


Figure 3:
Percentage Distribution of Scope 1 and 2 Emissions in 2022



Greenhouse gas emissions in 2022 were distributed as follows: 69% from fuels, 21% from electricity, and 6% from liquefied petroleum gas (LPG). The remaining categories together accounted for approximately 4%.

Figure 4:
Percentage Distribution of Scope 1 and 2 Emissions in 2023



Greenhouse gas emissions in 2023 were distributed as follows: 71% from fuels, 18% from electricity, and 7% from liquefied petroleum gas (LPG). The remaining categories together accounted for approximately 4%.

4. Accounting for Scope 3 Emissions

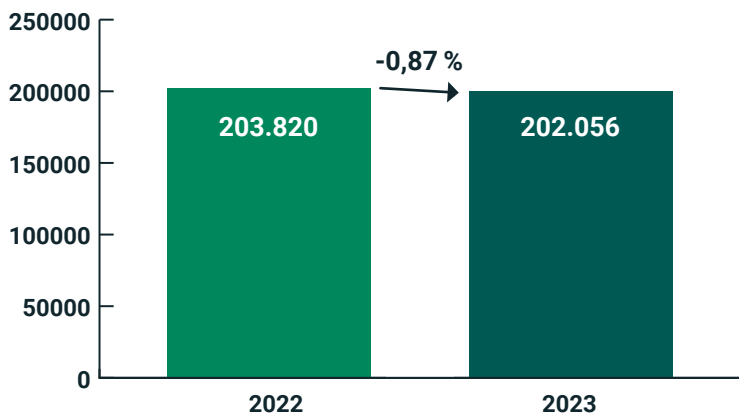
In 2022, the total Scope 3 emissions amounted to 203,820 tons of CO₂ equivalent, and in 2023, it was approximately 1,700 tons less, with 202,056 tons of CO₂ equivalent.

Table 3:
Results of the accounting for Scope 3 emissions by category

Category	2022	2023
Commuter traffic	184	187
Rented tangible assets	-	-
Business trips	-	18
Leased tangible assets	51	117
Purchased goods/services	195.907	194.572
Waste	73	69
Transport/Distribution (upstream)	5.689	5.672
Capital goods	1.916	1.421
Summe (to CO₂-equivalent)	203.820	202.056

The Scope 3 emissions decreased by about 0.87% from 2022 to 2023.

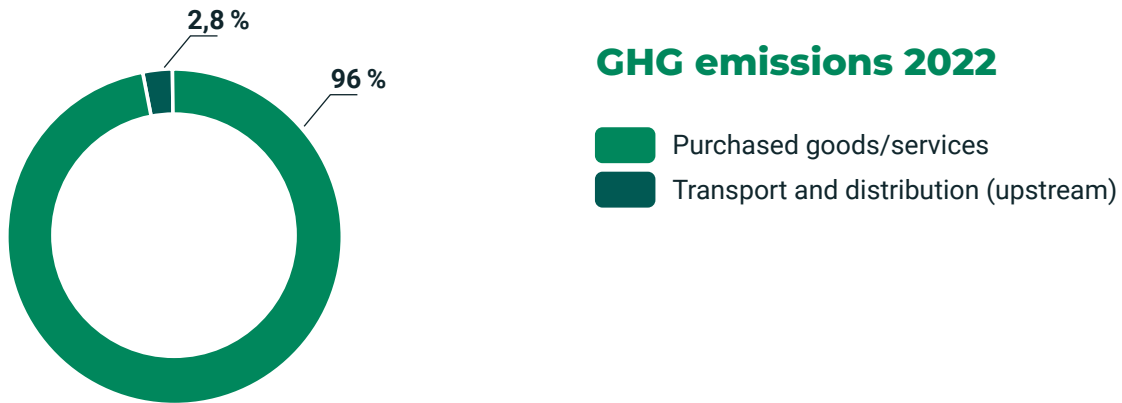
Figure 5:
Total Scope 3 emissions in 2022 and 2023 in tons of CO₂ equivalent.



The Scope 3 emissions in 2022 are distributed as follows: 96% for purchased goods and services and 2.8% for transport and distribution (upstream).

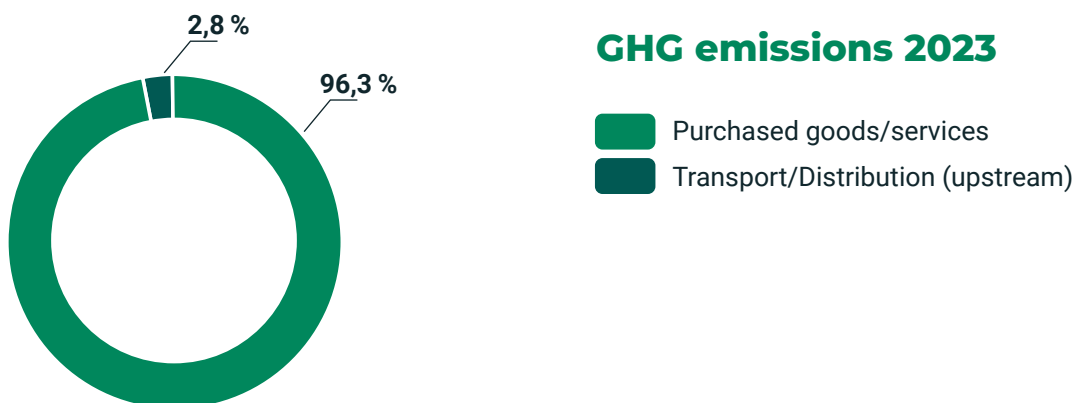
The following page contains the figures for the percentage distribution of Scope 3 emissions.

Figure 6:
Percentage distribution of Scope 3 emissions in 2022.



The Scope 3 emissions in 2022 are distributed as follows: 96% for purchased goods and services, and 2.8% for transport and distribution (upstream). The remaining categories each account for less than 1% of the GHG emissions.

Figure 7:
Percentage distribution of Scope 3 emissions in 2023.



The Scope 3 emissions in 2023 are distributed as follows: 96.3% for purchased goods and services, and 2.8% for transport and distribution (upstream). Compared to 2022, the emissions from purchased goods and services have slightly decreased in absolute terms, while the emissions from transport and distribution (upstream) have remained constant. The remaining categories each account for less than 1% of the GHG emissions.

A separate document on the methodology will be published soon, providing detailed insights into our approaches and strategies for promoting sustainability.