

GHG Emission report 2024

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1. Foreword

Acting sustainably means living in such a way that our children can also live in a world that meets their needs. Acting sustainably means taking responsibility for people, nature and the environment. Today and in the future.

Since the founding of Konrad Reitz Ventilatoren GmbH in 1948, as today part of the Reitz Group, we have been committed to the values and principles of a German, medium-sized family business: reliability, transparency and partnership with customers, employees and suppliers is a central component of our corporate philosophy. We are convinced that the promotion and further development of each individual employee is an essential prerequisite for a spirit of innovation, continuous improvement and sustainability in production and environmental protection.

The product portfolio of the Reitz Group includes much more than radial fans for various industrial sectors and applications such as the production of steel, cement, glass or dedusting and food industry or the chemical industry.

The increased variety offers specialized fan designs as well as application solutions for a wide variety of tasks. Special fans in individual dimensions and characteristics, stainless steel fans for the food industry or highly efficient modernization solutions for existing systems.

Third GHG emissions report:

Greenhouse gases are gases in the Earth's atmosphere that prevent some of the thermal radiation emitted from the Earth's surface from escaping into space. Human activities cause an increase in the concentration of these greenhouse gases in the atmosphere, especially carbon dioxide (CO₂). This intensifies the natural greenhouse effect. This additional contribution to the greenhouse effect is called the anthropogenic greenhouse effect.

2. Objective

The Reitz Group's goal is to account for emissions from 2024 and represent them as a corporate carbon footprint compared to the base year 2021.

Greenhouse gas balancing is the starting point and a steering element for climate protection measures in the Reitz Group. Both the preparation of the sustainability report and the emission reduction target are based on basic greenhouse gas accounting.

The aim of this greenhouse gas emission balance is to create transparency and identify the direct and indirect emissions in our company and along our value chain. This is the first step towards climate neutrality.

We developed the Reitz Group's reduction targets on the basis of the requirements of the Science Based Targets Initiative (SBTi) and defined them in close dialogue with the management. The Reitz Group's reduction targets are described in Chapter 5 of this report.

3. Scope

This report refers to the following Reitz companies:

- Konrad-Reitz Ventilatoren GmbH & Co. KG (KRV)
- Reitz Fans Suzhou Co., Ltd. (RFS)

Companies that belong to the Reitz Group but have $\leq 50\%$ ownership share do not fall within the scope of this Rules and Standards.

4. GHG balancing

4.1 Energy consumption of the relevant energy sources

The Reitz company uses different energy sources at its various locations:

- KRV site Höxter-Albaxen (HX for short): natural gas, electricity, local heating from a CHP plant, diesel,
- KRV site Hessisch-Lichtenau (HL for short): heating oil, electricity, diesel
- RFS: electricity, diesel

The data from the maintained management systems, in particular from the systems according to DIN EN ISO 50001 and DIN EN ISO 14001, form the basis of this report. In the further analysis, the two locations (HX and HL) of the KRV company are mutually accounted for.

An organization's carbon footprint (or greenhouse gas balancing) is known as the Corporate Carbon Footprint (CCF) and is a central aspect of sustainability reporting. The CCF provides information on all relevant greenhouse gas emissions of a company and distinguishes between direct (Scope 1 emissions) and indirect emissions (Scope 2) as well as emissions that occur along the value chain (Scope 3 upstream and downstream).

The accounting approach used below is "cradle to grave" (i.e. from product production to its end of life) and takes into account the Scope 1 – 3 emissions mentioned above.

Energy consumption KRV per year kWh

Energy carrier	2021 Base Year	2022	2023	2024
Electricity*	2.287.468	1.873.838	1.709.540	1.363.409
Fuel oil	631.780	614.528	618.776	631.698
Combined heat and power plant	2.026.720	1.618.830	1.591.000	1.435.960
Natural gas	1.384.036	1.368.681	1.306.166	1.254.609
Diesel	244.476	223.818	229.129	198.840
Electricity sold	n.a.	n.a.	127.197	498.793

* Mains supply

Energy consumption RFS per year kWh

Energy carrier	2021 Base Year	2022	2023	2024
electricity	689.460	670.184	553.450	514.423
Diesel	43.200	28.320	25.344	25.000

4.2 GHG Inventory

4.2.1 Scope 1 and Scope 2 Accounting

The basis for balancing Scope 1 and 2 emissions is the requirements of the Greenhouse Gas Protocol (GHG). The balancing was carried out with the help of the Ecocockpit tool of the State Agencies for Energy and Climate Protection of North Rhine-Westphalia and Hessen for the emissions of the KRV sites, as well as the use of CO₂ equivalents from the following source for the RFS site (<https://ourworldindata.org/electricity-mix>).

The emission factors used are shown in the following table for KRV, as well as for RFS (if no differentiation is made, the value is equally valid for both):

Energy carrier	2021	2024
electricity	0,473 Kg CO ₂ e / KWh (KRV); 0,428 Kg CO ₂ e / KWh (RFS)	0,435Kg CO ₂ e / KWh (KRV); 0,428 Kg CO ₂ e / KWh (RFS)
Local heating:	0,280 kg CO ₂ e / kWh	0,280 kg CO ₂ e / kWh
Natural gas:	0,182 kg CO ₂ e / KWh	0,182 kg CO ₂ e / KWh
Fuel oil:	0,266 kg CO ₂ e / KWh	0,266 kg CO ₂ e / KWh
Diesel:	3,102 kg CO ₂ e/l	3,102 kg CO ₂ e/l

Emissions KRV in t CO₂e

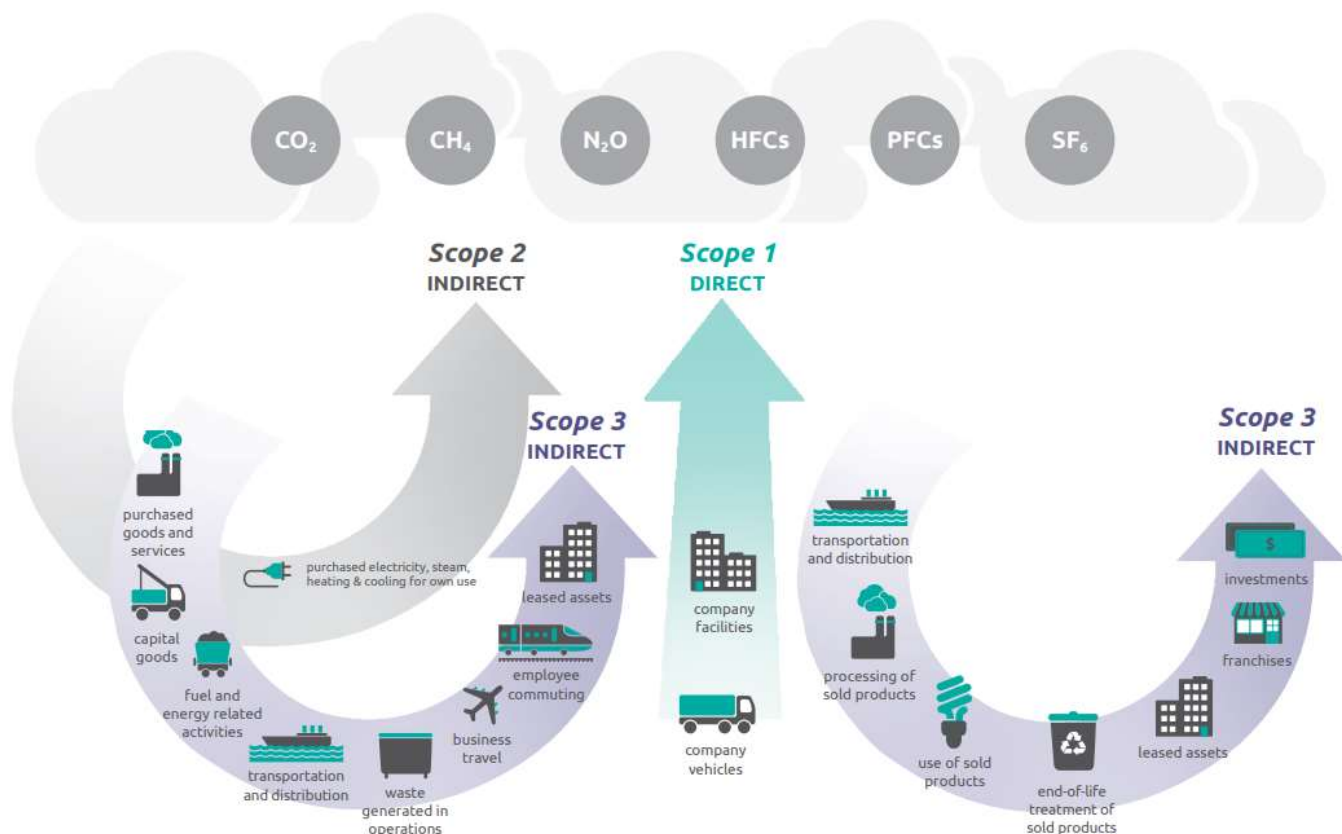
Scope	2021 Base year	2022	2023	2024
Scope 1	497	484	475	459
(Scope 2 (market based))	1.210	855	803	688
Scope 2 (location based)	1.649	1.139	1.071	995
Sum	2.147	1.623	1.546	1.455

Emissions RFS in t CO₂e

Scope	2021 Base year	2022	2023	2024
Scope 1	14	9	8	8
(Scope 2 (market based))	n.a.	n.a.	n.a.	n.a.
Scope 2 (location based)	295	291	322	266
Sum	309	300	330	274

4.2.2 Scope 3 - Accounting

Scope 3 emissions are indirect emissions that do not occur in a company's actual production process. The Greenhouse Gas Protocol (GHG Protocol) defines sub-scopes upstream and downstream of the production process of companies for the Scope 3 area. The prescriptions of the document "Technical Guidance for calculation Scope 3 emissions" of the GHG protocol constitute the basis on which the Scope 3 emissions have been accounted for. The following image shows the individual subscopes:



The accounting for the emissions of the KRV sites was carried out with the help of the Scope 3 Analyzer tool, developed by Pforzheim University of Applied Sciences. For the RFS site, some values from the upstream area were interpolated. The CO₂ coefficients from the following sources were used to calculate the emissions: <https://ourworldindata.org/electricity-mix>, as well as [Statistical Review of World Energy 2024.pdf](https://www.eia.org/energy-review/2024/)

Emissions in t CO₂e

Subscope	2021 KRV	2021 RFS	2024 KRV	2024 RFS
Purchased goods and services	16.340	6.863*	13.930	5.851*
Purchased capital goods	40	17*	110	46*
Emissions from fuel and energy-related activities	220	92*	160	67*
Transport and logistics upstream	100	42*	90	38*
Waste	142	105	126	74
Business trips	90	38*	140	59*
Commuter traffic of employees	700	229	750	315
Leased assets	0	0	0	0
Transport and logistics downstream	57	24	33	14
Processing of the products sold	0	0	0	0
Use of the products sold	2.319.418	1.358.316	1.191.501	978.328
End of life of the products sold	6.234	2.500	3.903	1.788
Leased assets downstream	0	0	0	0
Franchise	0	0	0	0
Investment	0	0	0	0
Sum	2.343.341	1.368.226	1.210.743	986.323

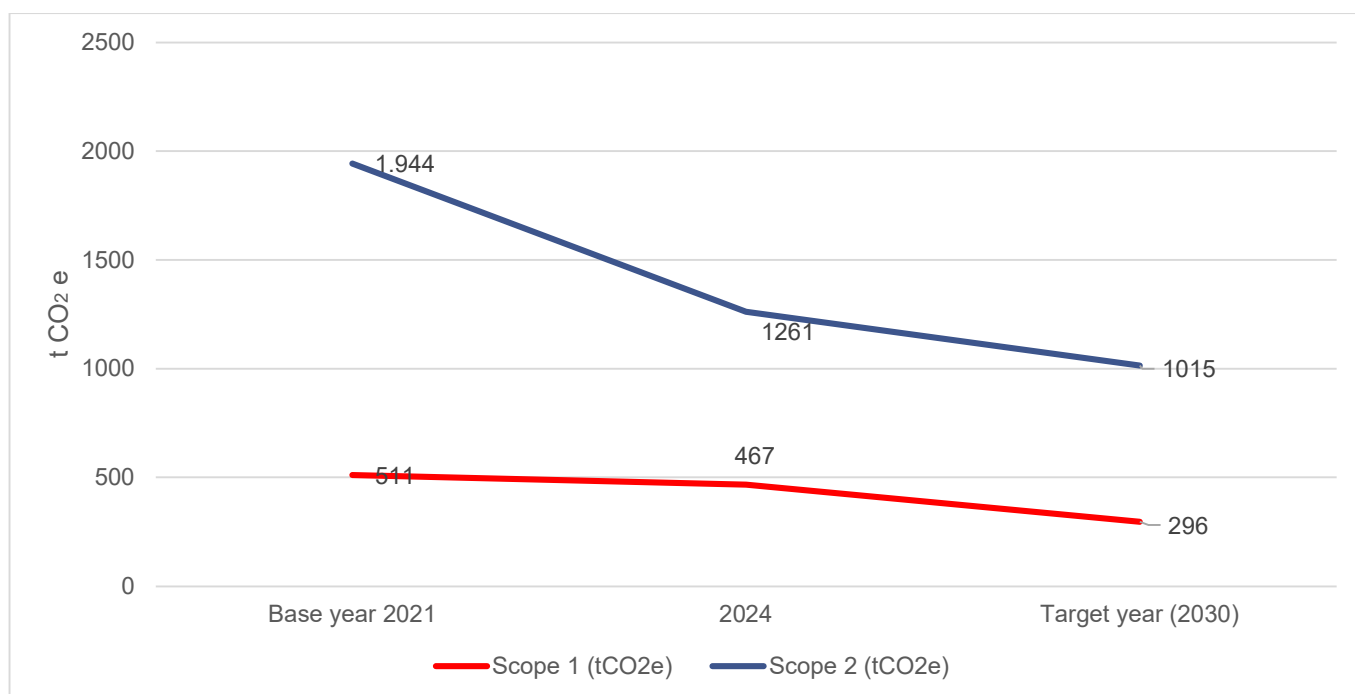
* Interpolated values of the RFS site

5. Reduction targets

The Reitz Group has committed itself to the scientific verification of its ecological sustainability objectives by the SBTi. The objectives developed for scopes 1 - 3 are shown below. The targets are "near term targets" developed according to the principles of the GHG Protocol. The base year for calculating the target here is also 2021; the target is to be achieved by 2030.

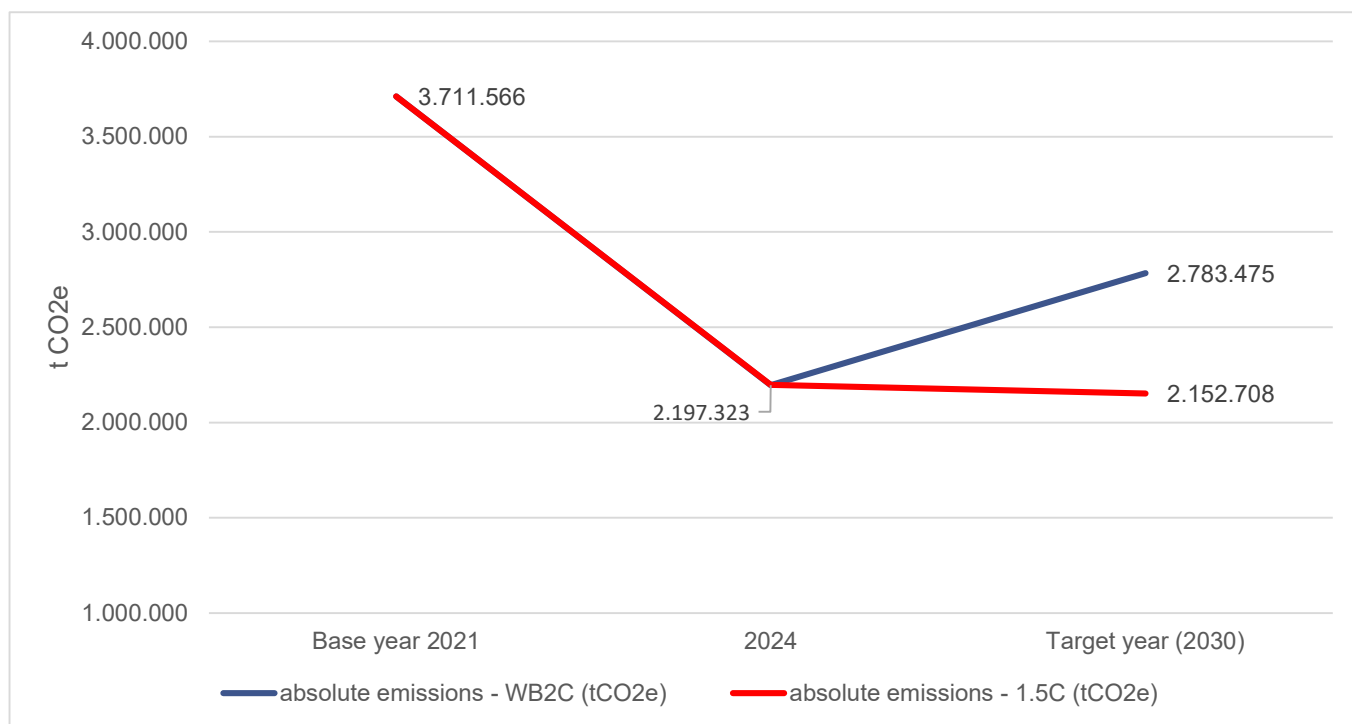
5.1 Scope 1 and Scope 2 objectives

Scope	2021 (Base year)	2024	2030 (Target year)	% SBT reduction
Scope 1 (t CO ₂ e)	511	467	296	42,00%
Scope 2 (t CO ₂ e)	1.944	1.261	1.015	47,80%
Scope 1+2 (t CO ₂ e)	2.455	1.728	1.311	46,59%



5.2 Scope 3 objectives

Scope	2021 (Base year)	2024	2030 (Target year)	% SBT reduction
absolute emissions - WB2C (t CO ₂ e)	3.711.566	2.197.323	2.783.475	25,00%



6. Measures for emission reduction

The Reitz Group defines the following measures to achieve the reduction targets for Scope 1 & Scope 2:

- Improving energy consumption efficiency for Scope 1 and Scope 2.
- Setting up non-heated storage areas to reduce heat requirements.
- Purchase of electricity from renewable sources to reduce Scope 2 emissions.
- Purchase of green gas from renewable sources to reduce Scope 1 emissions.

The Reitz Group defines the following measures to achieve the reduction targets for Scope 3:

- Improving the efficiency of our products through optimized design, an approximation to the operating point and the reduction of manufacturing tolerances.
- Intensive advice to our customers on efficient system control with frequency converters (FC)
- Improving the energy mix by increasing the share of renewable energies in electricity and the associated improvement of the CO₂ factor.

7. Conclusion & Outlook

The accounting of GHG emissions shows that very large reductions have been achieved since 2021, especially in the areas of Scope 2 and 3. The installation of a photovoltaic system at the KRV site in Höxter-Albaxen independently produces a major part of the required electricity. The analysis of Scope 3 emissions in the subscope "Use of products sold" shows a significant increase in fans operated with variable speed control. The average connection power has also fallen since 2021, which shows a trend towards less constructional safety that is towards a more precise design of the fans to meet the needs of the customers.

GHG emissions are updated annually. The methods and measures to achieve the goals are also adapted annually.

The data collection was carried out and processed by representatives of the Reitz Group.

This report was prepared by order of Reitz Holding for the Reitz Group.

Höxter, 26 May 2025

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Abbreviations

CO ₂	- Carbon dioxide
CO ₂ e	- Carbon dioxide equivalent
GHG	- Greenhouse gas
SBT	- science based target
SBTi	- science based targets initiative
THG	- Greenhouse gas
kWh	- Kilowatt hour
CCF	- corporate carbon footprint
PCF	- product carbon footprint
CDP	- carbon disclosure project
FU	- frequency inverter
KRV	- Konrad-Reitz Ventilatoren GmbH & Co. KG
RFS	- Reitz Fans (Suzhou) Co., Ltd.
HX	- Höxter
HL	- Hess. Lichtenau
WB2C	- Well Below 2 Degrees Celsius (deutlich unter 2° Celsius)