ClimatePartner

Report

Corporate Carbon Footprint

Group: CCF 2021 Schneider Schreibgeräte GmbH

December 2022

Schneider Schreibgeräte GmbH

Corporate Carbon Footprint

Schneider Schreibgeräte GmbH has worked with ClimatePartner to calculate several of their company's carbon footprints: Corporate Carbon Footprints (CCFs).
The CCF is the sum of the CO_2 emissions released by the company within the defined system boundaries over a specified period of time. In this report, the different CCFs are grouped together as **CCF 2021 Schneider Schreibgeräte GmbH** and include the following individual calculations: **Corporate Carbon Footprint Tennenbronn 2021** and **Corporate Carobon Footprint Wernigerode 2021**.

The calculations were based on the guidelines of the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

CCF - the basis for climate action

Calculate, reduce, offset - these are the crucial steps to tackling climate change in accordance with the Paris Agreement.

The foundation for any climate action starts with calculation: A company that knows their carbon footprint also knows which parts of their business cause emissions and how high the emissions are.
At the same time, a carbon footprint helps companies to understand which areas have the greatest potential for avoidance and reduction, to set reduction targets, and to develop and implement appropriate reduction measures. Annual CCF reports allow companies to check their progress against reduction targets and to identify areas where emissions can be further reduced.

If the generated emissions are offset, a company can credibly claim carbon neutrality.

Overall results

This is the result of the calculation for the group's business activities **CCF 2021 Schneider Schreibgeräte GmbH**.

CO_2 emissions

	Result
Overall results	19,271,118.58 kg CO_2

By comparison

The emissions correspond to the carbon footprint of 2,219 Europeans. One person in Europe emits an average of 8.7 t of CO_2 per year [1]

1) Source: EEA 2019, European Environment Agency: EEA greenhouse gas - data viewer, EU-27 value for total emissions with international transport (CO_2e), https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer (retrieved 01/31/2022.)

Our calculation approach

Principles

In preparing the corporate carbon footprint and this report, five basic principles were observed in accordance with the GHG Protocol:

Relevance: The calculation should account for all greenhouse gas (GHG) emissions that appropriately reflect the company's carbon footprint. This report is designed to support internal and external decision-making.

Completeness: The report must include all GHG emissions within the selected system boundaries. Any significant exclusions of data must be clearly documented, disclosed, and justified.

Consistency: Consistent methodologies are used so that the company's emissions can be can be compared over time.

Transparency: All important aspects of a company are recorded objectively, and any assumptions, data gaps and resulting extrapolations or data exclusions are presented clearly and openly in this report.

Accuracy: The calculations of GHG emissions are designed to ensure that they are neither over- nor undervalued. The report aims to be as accurate as possible and to minimise uncertainties, so that the company can make appropriate decisions.

Data collection and calculation

CO_2 emissions were calculated using the company's consumption data and emission factors researched by ClimatePartner. Wherever possible, primary data were used. If no primary data were available, secondary data from highly credible sources were used. Emission factors were taken from scientifically recognized databases such as ecoinvent and DEFRA.

CO_2 equivalents

The corporate carbon footprint calculates all emissions as CO_2 equivalents (CO_2e), which this report also refers to as "CO_2".

This means that all relevant greenhouse gases, as stated in the IPCC Assessment Report, were taken into account in the calculations. These include carbon dioxide (CO_2), methane (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3). Each gas has a different ability to warm the earth's atmosphere, and each remains in the atmosphere for different lengths of time.To make their effect comparable, they are converted to CO_2 equivalents (CO_2e) as a basic unit and multiplied by their global warming potential (GWP). The GWP describes how strong a gas can warm the atmosphere compared to CO_2 over a period of time, usually 100 years.

For example, methane has a global warming potential of 28, so the warming effect of methane is 28 times greater than CO_2 over 100 years. [2]

Electricity: market-based and location-based approaches

Emissions for electricity were calculated using both the market-based method and the location-based method. This dual reporting approach is recommended by the GHG Protocol.

For the market-based method, the company provided specific emission factors for the electricity they purchased, if available. If these specific factors were not available, factors for the residual mix in the country of operation were used, or, if this was unavailable, the average grid mix of the country was used.

The report also states the location-based method. In this method, the average electricity grid mix for the country is calculated. This enables a direct comparison of the company's values with the country-specific average.

2) Source: Intergovernmental Panel on climate change, “Climate Change 2021 The Physical Science Basis”, S. 1842, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf (retrieved on 31.01.2022)

Operational System Boundaries

Operational System Boundaries indicate which of the company's activities are taken into account for the individual carbon footprints of **CCF 2021 Schneider Schreibgeräte GmbH**. The various emission sources have been divided into three scopes in accordance with the GHG Protocol:

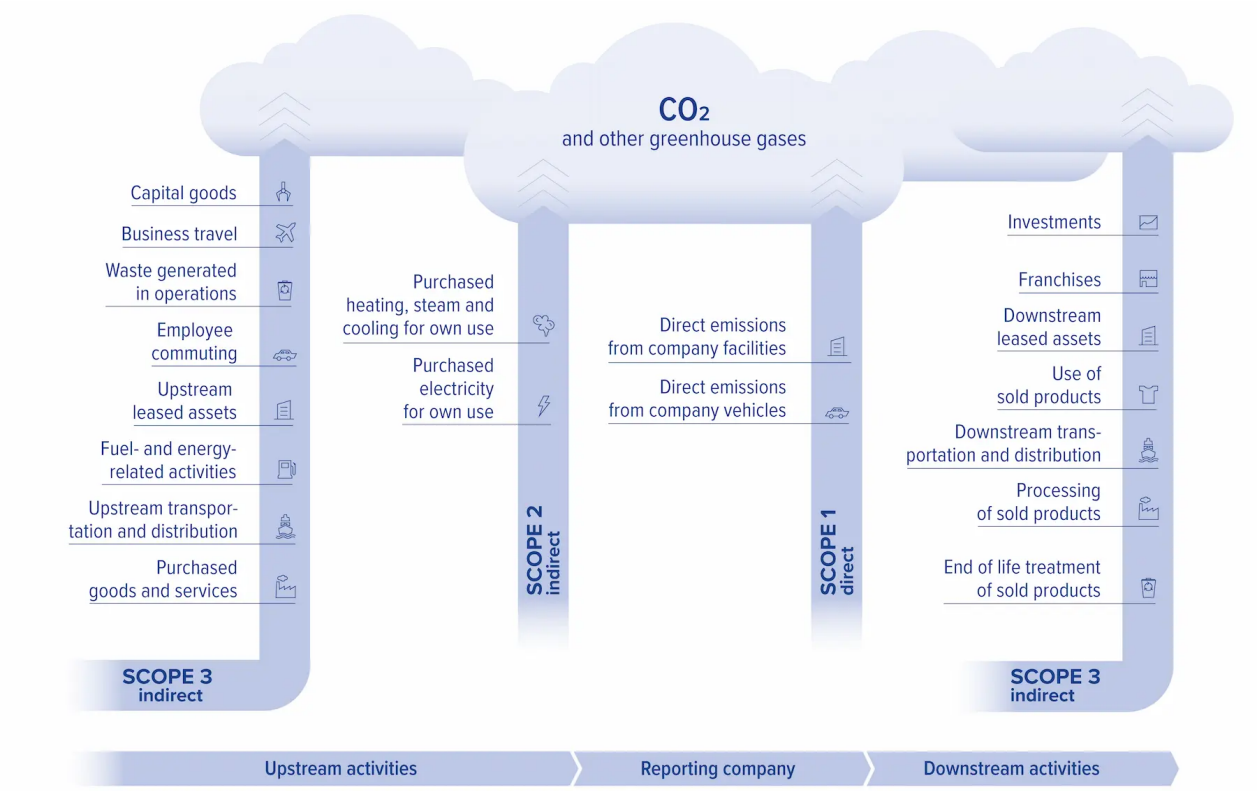
Scope 1 includes all emissions generated directly by **Schneider Schreibgeräte GmbH**, for example by company-owned equipment or vehicle fleets.

Scope 2 lists emissions generated by purchased energy, for example electricity and district heating.

Scope 3 includes all other emissions that are not under direct corporate control, such as employee travel or product disposal.

Figure

Activities divided by scope

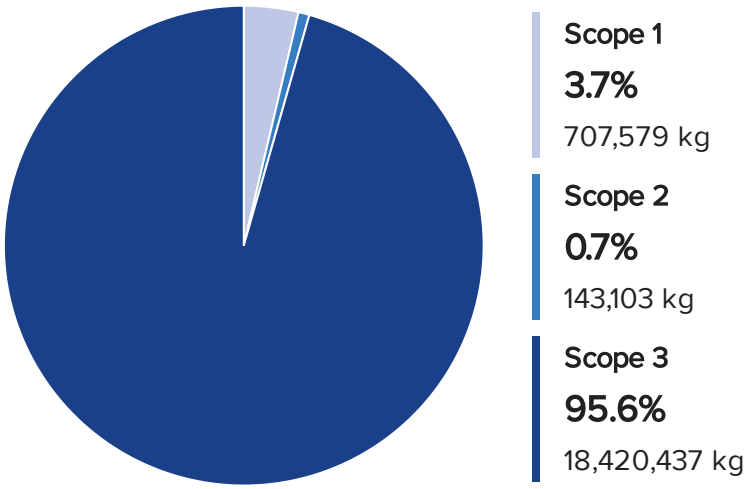


Largest emission sources - greatest potential for reduction

The CCF identifies the largest sources of emissions of the group **CCF 2021 Schneider Schreibgeräte GmbH**. This is important in driving climate action as it highlights which areas should be prioritised in relation to emission reduction and avoidance.

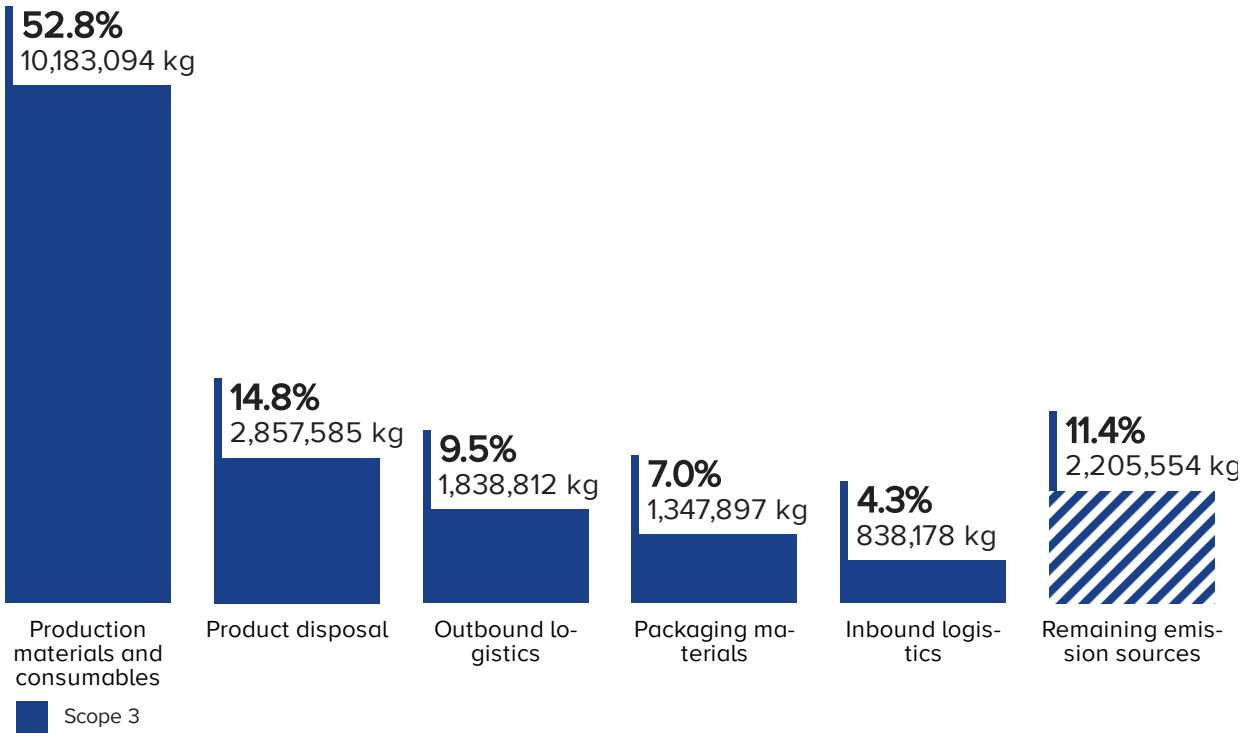
Figure

CO_2 emissions categorised by scope 1, 2, and 3



Figure

The largest CO_2 emission sources



CCF Results Table: Schneider Schreibgeräte GmbH

Total results for the group **CCF 2021 Schneider Schreibgeräte GmbH**

Emission sources	kg CO_2	%
Scope 1	**707,578.55**	**3.7**
Direct emissions from company facilities	679,149.34	3.5
Heat (self-generated)	679,149.34	3.5
Direct emissions from company vehicles	28,429.21	0.1
Vehicle fleet	28,429.21	0.1
Scope 2	**143,102.92**	**0.7**
Purchased heating, steam, and cooling for own use	142,689.21	0.7
Heat (purchased)	142,689.21	0.7
Purchased electricity for own use [3]	413.71	0.0
Electricity (vehicle fleet)	413.71	0.0
Electricity (stationary)	0.00	0.0
Scope 3	**18,420,437.11**	**95.6**
Purchased goods and services	11,577,592.44	60.1
Production materials and consumables	10,183,093.55	52.8
Packaging materials	1,347,896.60	7.0
Print products	24,630.99	0.1
Water	16,363.75	0.1
Office paper	5,607.56	0.0
End-of-life treatment of sold products	2,857,584.52	14.8
Product disposal	2,857,584.52	14.8
Downstream transportation and distribution	1,838,811.58	9.5
Outbound logistics	1,838,811.58	9.5
Upstream transportation and distribution	838,178.50	4.3
Inbound logistics	838,178.50	4.3
Employee commuting	571,493.89	3.0
Employee Commuting	554,040.67	2.9
Home office	17,453.22	0.1
Fuel- and energy-related activities	394,556.92	2.0
Upstream emissions electricity	221,981.61	1.2
Upstream emissions heat	155,695.88	0.8
Upstream emissions vehicle fleet	16,879.43	0.1

3) Calculated using the market-based method. Emissions calculated using the location-based method are 1,871,886.90 kg CO_2.

CCF Results Table: Schneider Schreibgeräte GmbH

Total results for the group **CCF 2021 Schneider Schreibgeräte GmbH**

Emission sources	kg CO_2	%
Waste generated in operations	339,774.60	1.8
Operational waste	339,774.60	1.8
Business travel	2,444.65	0.0
Rail	2,444.65	0.0
Overall results	**19,271,118.58**	**100.0**

CCF Results Table: Schneider Schreibgeräte GmbH

For comparison, the total emissions of all individual calculations

CCF 2021 Schneider Schreibgeräte GmbH	kg CO_2	%
Corporate Carbon Footprint Tennenbronn 2021	14,981,427.91	77.7
Corporate Carobon Footprint Wernigerode 2021	4,289,690.67	22.3

CCF Results Table: Schneider Schreibgeräte GmbH

Results of the individual calculation **Corporate Carbon Footprint Tennenbronn 2021**

Emission sources	kg CO_2	%
Scope 1	**704,796.69**	**4.7**
Direct emissions from company facilities	679,149.34	4.5
Heat (self-generated)	679,149.34	4.5
Direct emissions from company vehicles	25,647.35	0.2
Vehicle fleet	25,647.35	0.2
Scope 2	**413.71**	**0.0**
Purchased electricity for own use [4]	413.71	0.0
Electricity (vehicle fleet)	413.71	0.0
Electricity (stationary)	0.00	0.0
Scope 3	**14,276,217.51**	**95.3**
Purchased goods and services	8,909,878.55	59.5
Production materials and consumables	8,094,863.88	54.0
Packaging materials	769,364.43	5.1
Print products	24,630.99	0.2
Water	16,064.32	0.1
Office paper	4,954.93	0.0
End-of-life treatment of sold products	2,046,161.88	13.7
Product disposal	2,046,161.88	13.7
Downstream transportation and distribution	1,836,860.26	12.3
Outbound logistics	1,836,860.26	12.3
Upstream transportation and distribution	517,018.18	3.5
Inbound logistics	517,018.18	3.5
Employee commuting	391,122.08	2.6
Employee Commuting	373,668.86	2.5
Home office	17,453.22	0.1
Fuel- and energy-related activities	312,071.23	2.1
Upstream emissions electricity	209,292.21	1.4
Upstream emissions heat	87,464.87	0.6
Upstream emissions vehicle fleet	15,314.15	0.1
Waste generated in operations	260,743.32	1.7
Operational waste	260,743.32	1.7

4) Calculated using the market-based method. Emissions calculated using the location-based method are 1,871,886.90 kg CO_2.

CCF Results Table: Schneider Schreibgeräte GmbH

Results of the individual calculation **Corporate Carbon Footprint Tennenbronn 2021**

Emission sources	kg CO_2	%
Business travel	2,362.00	0.0
Rail	2,362.00	0.0
Overall results	**14,981,427.91**	**100.0**

CCF Results Table: Schneider Schreibgeräte GmbH

Results of the individual calculation **Corporate Carobon Footprint Wernigerode 2021**

Emission sources	kg CO_2	%
Scope 1	**2,781.85**	**0.1**
Direct emissions from company vehicles	2,781.85	0.1
Vehicle fleet	2,781.85	0.1
Scope 2	**142,689.21**	**3.3**
Purchased heating, steam, and cooling for own use	142,689.21	3.3
Heat (purchased)	142,689.21	3.3
Purchased electricity for own use	0.00	0.0
Electricity (vehicle fleet)	0.00	0.0
Electricity (stationary)	0.00	0.0
Scope 3	**4,144,219.60**	**96.6**
Purchased goods and services	2,667,713.89	62.2
Production materials and consumables	2,088,229.67	48.7
Packaging materials	578,532.16	13.5
Office paper	652.63	0.0
Water	299.43	0.0
End-of-life treatment of sold products	811,422.64	18.9
Product disposal	811,422.64	18.9
Upstream transportation and distribution	321,160.32	7.5
Inbound logistics	321,160.32	7.5
Employee commuting	180,371.81	4.2
Employee Commuting	180,371.81	4.2
Fuel- and energy-related activities	82,485.69	1.9
Upstream emissions heat	68,231.01	1.6
Upstream emissions electricity	12,689.40	0.3
Upstream emissions vehicle fleet	1,565.29	0.0
Waste generated in operations	79,031.28	1.8
Operational waste	79,031.28	1.8
Downstream transportation and distribution	1,951.32	0.0
Outbound logistics	1,951.32	0.0
Business travel	82.65	0.0
Rail	82.65	0.0
Overall results	**4,289,690.67**	**100.0**

Next steps

Schneider Schreibgeräte GmbH should use these findings to drive meaningful climate action. This includes finding ways to continuously reduce emissions as well as offsetting any emissions that cannot immediately be reduced. Climate neutrality is achieved through offsetting, and the label may be used accordingly.

Reducing emissions

The concentration of greenhouse gases in the atmosphere is responsible for global warming so we must reduce our emissions as quickly and broadly as possible. Defining clear and measurable reduction targets are the best way to start. A reduction plan detailing specific actions and team responsibilities will help the organisation to make quick and meaningful progress.

A creative and courageous approach is needed. Reduction targets should be ambitious and reflective of current scientific and technological understanding. ClimatePartner recommends differentiating between short-, medium-, and long-term reduction targets because some measures can be implemented quickly whilst others take time, for example, making changes to processes, product design and supply chains. Creating reduction plans is a continuous, iterative process that should be an integral part of the corporate strategy.

Reduction guide

In general, any reduction measures should be relevant to the needs of the company: there are no standard solutions. The corporate carbon footprint enables you to identify reduction potentials and use this knowledge to define individual reduction measures.

In general, there are two ways to reduce emissions:

Decrease activities that emit greenhouse gases, for example, by reducing energy consumption, use of raw materials, or the number of business trips taken by employees.

Reduce the intensity of emissions by selecting services, raw materials, and energy products that have lower emission factors, for example, by switching to a green electricity tariff.

The following section lists some the options for taking climate action. [5]

Scope 1 + 2

- **Use renewable energy sources** by switching to biogas, green electricity, etc.
- **Use more climate-friendly refrigerants** by switching to ammonia, propane, etc.
- **Increase energy efficiency** through newer machines, etc
- **Optimise processes and products** through new procedures, improved product design, etc.

Scope 3

- **Conserve resources** through avoidance, such as making fewer business trips, using less packaging, producing less waste, etc.
- **Use more climate-friendly raw materials** such as plant-based, regional and recycled raw materials
- **Choose more climate-friendly options in daily activities,** such as taking the train over flights or choosing a company bicycle over a company car, etc.
- **Engage with your suppliers** and encourage them to take more climate action by sharing best practices, knowledge, etc.
- **Engage your employees** by offering incentives to implement climate-friendly measures, providing continual training opportunities, etc.

5) This overview does not guarantee completeness. Each measure must be assessed for appropriateness to the specific company.

Offsetting emissions

We must act now to limit global warming to 1.5 °C. Implementing CO_2 reduction measures usually needs a long-term, step-by-step approach. ClimatePartner therefore recommends that **Schneider Schreibgeräte GmbH** offsets any remaining emissions (those which cannot currently be reduced) immediately by supporting certified carbon offset projects. In doing so, companies take responsibility for the emissions they are emitting today whilst taking action to reduce their emissions over time.

Why offsets work

Greenhouse gases such as CO_2 are evenly distributed in the atmosphere, and the concentration of greenhouse gases is therefore similar everywhere on earth. Emissions that cannot yet be avoided by a company can thus be offset by carbon offset projects anywhere in the world.

More than just climate action

Offset projects function in different ways. Some remove CO_2 from the atmosphere, for example, through reforestation projects, whilst others prevent further CO_2 emissions, for example, through the expansion of renewable energies.

In addition, our high-quality carbon offset projects promote the economic, social, and sustainable development of the region. Each of our projects are certified according to international standards, thus ensuring that they improve the lives of local communities as well as the climate.

Verified emissions savings

The exact amount of CO_2 saved by each project is determined by independent organisations. The project developers can then sell these CO_2 savings in the form of certified emission reductions. The resulting income then finances the project, which would be unable to function without it. Further information is available at: https://www.climatepartner.com/en/carbon-offset-projects

Carbon neutrality

Once a company offsets their emissions, they become carbon neutral.

To ensure that all emissions generated are offset within the system boundaries, a safety margin of 10% is applied to the total footprint. This compensates for uncertainties in the underlying data that naturally arise from the use of database values, assumptions or estimates.

CO_2 Offsets

	kg CO_2
Overall results	**19,271,118.58**
Not yet carbon neutral	19,271,118.58
Already carbon neutral	0.00
CO_2 emissions to be offset incl. 10% safety margin	**21,198,230.43**

Effective climate action

Our ClimatePartner team are happy to help you take further climate action!

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Imprint

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