ClimatePartner

Corporate Carbon Footprint Report

2024

Kalkancı Pres Döküm ve Kalip San. Tic. A.S.

2025-09-12

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01. Glossary

Stationary combustion	This category includes emissions which result from combustion of fuels in stationary sources, e.g., boilers, furnaces, turbines. It can refer to generation of electricity, heat or steam.
Mobile combustion	Emissions associated with mobile combustion result from the combustion of fuels in company owned/controlled mobile combustion sources such as vehicle fleet (e.g. trucks, trains, cars, vans, buses, airplanes, ships and similar.)
Fugitive emissions	Result from intentional or unintentional releases, e.g., refrigeration equipment leaks.
Process emissions	Typically result from manufacture or processing of chemicals and materials, e.g., cement, aluminium, adipic acid, ammonia manufacture, and waste processing.
Fuel and energy-related activities (not included in Scope 1 or Scope 2)	Cover upstream (cradle-to-gate) emissions of purchased fuels and electricity, such as emissions related to grid maintenance, infrastructure, Well-to-Tank emissions and similar.

02. Introduction

Calculate, reduce, contribute to climate projects and communicate - these are the key 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 those 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 corporate carbon footprint reports allow companies to check their progress against reduction targets and to identify areas where emissions can be further reduced.

ClimatePartner has measured a Corporate Carbon Footprint (CCF) of **Kalkancı Pres Döküm ve Kalip San. Tic. A.S.**. It represents the Greenhouse Gas (GHG) emissions generated by the company’s business activities throughout the reporting period of **2024**, and includes all relevant emission sources within the defined system boundaries. In this report, the CCF refers to **Corporate Carbon Footprint 2024.**

The assessment was based on the world's most widely used greenhouse gas accounting standards for companies: the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

03. Overall results

This is the result of the calculation: **Corporate Carbon Footprint 2024** for the time period **2024**:

Scope 1	3,100.88 t CO_2
Scope 2	2,985.52 t CO_2
Scope 3	5,686.92 t CO_2
Overall result	**11,773.33 t CO_2**

04. Methodology

Principles

In accordance with the GHG Protocol, this assessment follows five basic principles:

- RELEVANCE
  The carbon footprint appropriately reflects the GHG emissions of the subject and enables the user to make informed decisions.
- COMPLETENESS
  The carbon footprint covers all GHG emissions within the selected system boundaries. If relevant emission sources were excluded, this is documented and justified.
- TRANSPARENCY
  All relevant aspects are addressed and documented in a factual coherent, clear, and understandable manner.
- CONSISTENCY
  Comparable methodologies are implemented so that emissions can be tracked over time. Changes in data, system boundaries, or methods are transparently documented.
- ACCURACY
  The calculation of GHG emissions is not systematically too high or too low and uncertainties are minimised. The information provided is accurate enough to allow users to make informed decisions.

CO_2 equivalents

The carbon footprint calculates all emissions as CO_2 equivalents (CO_2e) which this report may also refer to as "CO_2". This means that all relevant greenhouse gases, as stated in the IPCC Assessment Report, were taken into account. These include: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).
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, all gases 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 30, so the warming effect of methane is 30 times greater than CO_2 over 100 years.[1]

System boundaries

Organisational system boundaries

Organisational system boundaries have been established following the operational control approach. Under this approach, a reporting company accounts for 100% of the emissions from operations at which it has the full authority to introduce and implement operating policies.
For this this report, the company decided to include the following calculations within their system boundaries:

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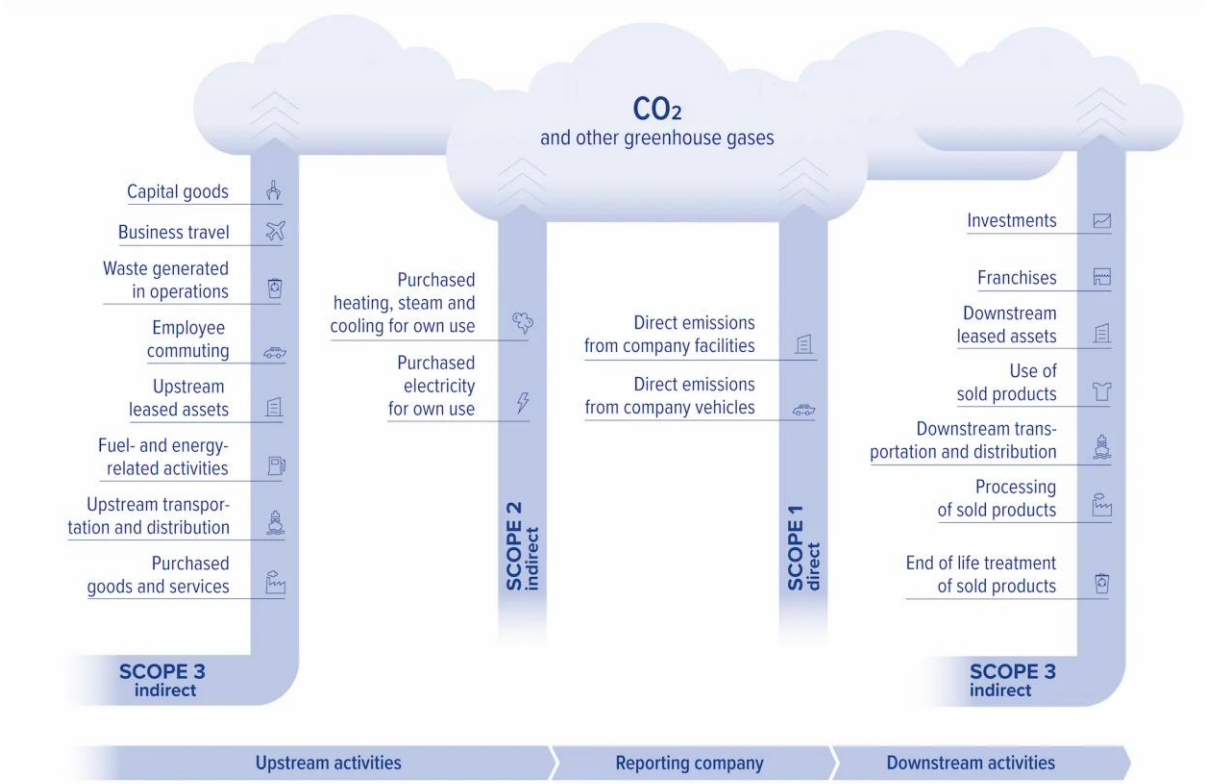
[1] Source: Intergovernmental Panel on Climate Change, "Climate Change 2021 The Physical Science Basis", p. 1017, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport.pdf (retrieved on 08.05.2025)

Operational system boundaries

Operational system boundaries indicate which business activities are covered by the carbon footprint. The emission sources have been grouped into three scopes:
Scope 1 includes all direct emissions, for example generated through the use of fuel in company-owned equipment or vehicle fleets.
Scope 2 covers emissions from purchased energy, such as electricity and district heating.
Scope 3 includes all other emissions that are not under direct company's control, such as employee travel or purchased goods.
The visual below provides an overview of all the emission sources under Scopes 1, 2 and 3.



In this assessment, Kalkancı Pres Döküm ve Kalip San. Tic. A.S. decided to address only the most relevant emission categories and to include the remainder of Scope 3 in the future assessments. In addition, there were some exclusions made within the categories that were considered. See Annex 1 for the emission categories that have been excluded from this assessment.

Data quality and collection

There are two types of data used in carbon footprint calculations: activity data and emission factors. Activity data refers to consumption (e.g. energy or fuel), weight (e.g. of generated waste of purchased material), quantity (e.g. number of items bought, mileage travelled etc.) or other measures that an activity can be quantified by. An emission factor is a scientifically measured amount of CO_2 that is generated by a certain activity (e.g. kg of CO_2 per km driven, kg CO_2 per kg of material produced, kg CO_2 per kWh consumed etc.)
The emissions were calculated using primary or secondary consumption/activity data and emission factors researched by ClimatePartner. The GHG Protocol defines primary and secondary activity data as follows:

Primary data	**Secondary data**
Is data provided by suppliers or other value chain partners related to specific activities or emissions in the reporting company's value chain.	Includes industry-average data (e.g. from published databases, government statistics, literature studies, and industry associations), financial data, proxy data, and other generic data.

In this assessment, secondary data was used only when primary data was unavailable. Emission factors were obtained from scientifically recognised databases and sources[2], including: CP calculation, DEFRA, Ecoinvent 3.10, Ecoinvent 3.11, IPCC, Ökobaudat, CP Calculation.

Scope 1 and 2 data is typically easier to collect because these activities are often run by companies themselves, therefore making activity records more accessible. Scope 3 primary data, on the other hand, tends to be less available and the emission calculation often requires extrapolations, proxies and secondary data sources. The table below summarises the primary and secondary data ratio for Scope 3. It may help to assess the existing data quality and track the progress towards data quality improvement over time.

[2] Some emission factors might have been calculated by ClimatePartner and labelled as "CP calculation". This means that a specific emission factor was derived by ClimatePartner using original emission factors from scientific emission factor databases, research papers or other credible and verified sources. For example, ClimatePartner might have calculated an emission factor for a coffee break by applying original emission factors for coffee grounds, boiled water and milk.

Data category	Scope	Primary data ratio	Secondary data ratio
Data share for activity data	Scope 3	94.8%	5.2%
Data share for emission factor data	Scope 3	0%	100%

The results of this report are based on the input data provided by **Kalkancı Pres Döküm ve Kalip San. Tic. A.S..** As ClimatePartner is unable to verify this data, any liability on the part of ClimatePartner for results arising from incorrect, incomplete, or outdated data is expressly excluded.
The accuracy of the results directly depends on the data provided or entered.

Assumptions and limitations

High quality primary data is always recommended for the calculation of an accurate footprint, however it cannot always be collected due to time or operational limitations. To fill the data gaps, extrapolations and estimates were made. While it was done in a pragmatic way, it should be noted that estimations are more likely than not to be conservative to ensure that emissions are not under-counted.
Increasing the primary data ratio and improving its quality to ensure high-level accuracy and credibility of the results is recommended and ClimatePartner can support **Kalkancı Pres Döküm ve Kalip San. Tic. A.S.** with achieving this.
The overview of assumptions that have been made in this assessment are summarised in Annex 2.

Electricity: market-based and location-based approaches

Emissions for electricity were calculated using both the market-based and the location-based methods. 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 this data was not available, secondary emission factors for the residual mix in the country of operation were used, or, if this was unavailable as well, the average grid mix of the country was used.
The report also provides a value measured using the location-based method. According to this approach, the average electricity grid mix for the country was considered and respective emission factors used to calculate the emissions.

05. Carbon footprint results

Overall results

The following emissions were calculated for **Corporate Carbon Footprint 2024** for the period **2024.** This is a consolidated result of all the individual calculations which were selected to be included in this report.

The graphs below provide a visual representation of the overall emissions by scope and an overview of the largest emission sources within this carbon footprint. Identifying hotspots is essential when considering reduction potentials and setting targets.

Figure 1. Emissions categorised by scope 1,2 and 3

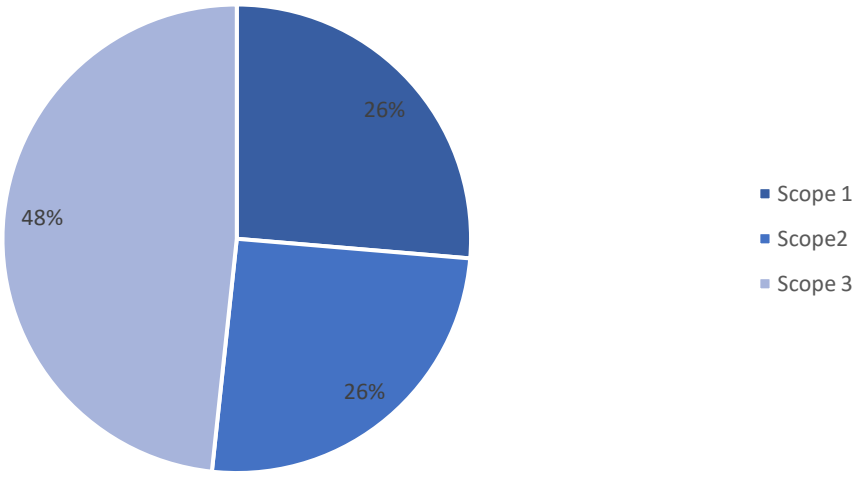
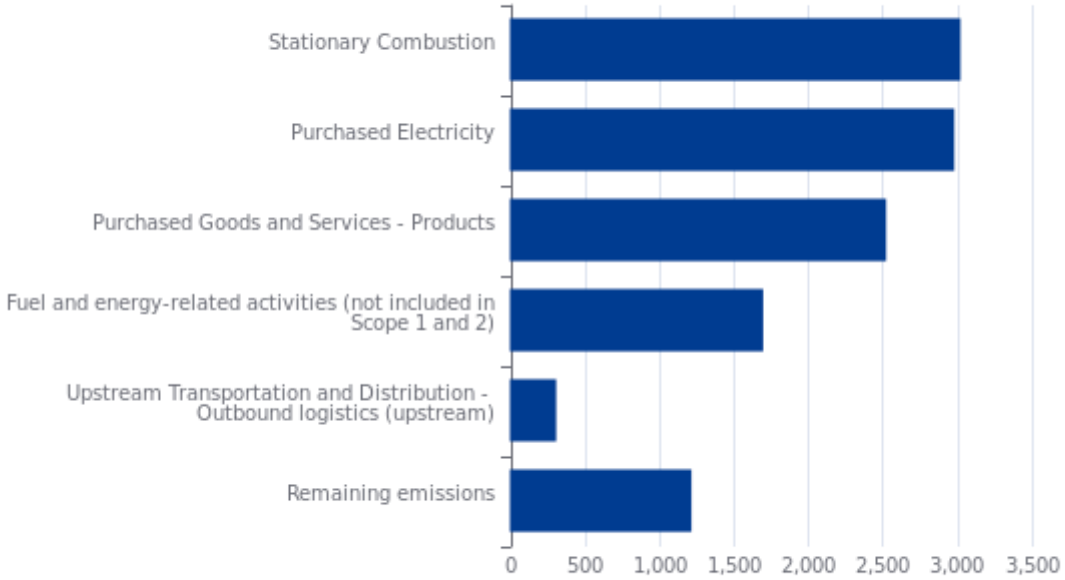


Figure 2. The largest emission sources (t CO_2)



Emission sources	t CO_2	%
Scope 1	**3,100.88**	**26.34**
Stationary combustion	3,027.23	25.71
Mobile combustion	53.83	0.46
Fugitive emissions	19.82	0.17
Scope 2	**2,985.52**	**25.36**
Purchased electricity Calculated using the market-based method	2,985.52	25.36
Purchased heating	0.00	0.00
Purchased cooling	0.00	0.00
Scope 3	**5,686.92**	**48.30**
Purchased goods and services	2,847.96	24.19
Fuel- and energy-related activities (not incl. in Scope 1 or Scope 2)	1,700.99	14.45
Upstream transportation and distribution	427.18	3.63
Waste generated in operations	55.71	0.47
Business travel	14.38	0.12

Emission sources	t CO_2	%
Employee commuting	295.42	2.51
Downstream transportation and distribution	284.13	2.41
End-of-life treatment	61.15	0.52
Overall results	**11,773.33**	

Electricity	t CO_2
Purchased electricity Calculated using the location-based method	2,985.52

A further breakdown of **Scope 3** categories is presented in the table below.

Emission sources	t CO_2	%
Scope 3	**5,686.92**	**48.30**
Purchased goods and services	2,847.96	24.19
Products	2,528.64	21.48
Packaging	152.19	1.29
Purchased goods	4.23	0.04
Food & beverages	157.72	1.34
External data center	0.86	0.01
Water	4.32	0.04
Fuel- and energy-related activities (not incl. in Scope 1 or Scope 2)	1,700.99	14.45
Upstream transportation and distribution	427.18	3.63
Inbound logistics	115.88	0.98
Outbound logistics (upstream)	311.30	2.64
Waste generated in operations	55.71	0.47
Business travel	14.38	0.12
Flights	13.93	0.12
Hotel stays	0.45	0.00
Employee commuting	295.42	2.51
Employee commuting and Working from home	295.42	2.51
Downstream transportation and distribution	284.13	2.41

Emission sources	t CO_2	%
Outbound logistics (downstream)	284.13	2.41
End-of-life treatment	61.15	0.52
Overall results	**11,773.33**	

Setting reduction targets

Reducing emissions is vital, and setting clear, ambitious and measurable targets is the best way to start. The reduction targets should reflect current scientific and technological understanding, and a reduction plan detailing specific actions and team responsibilities can help the organisation to make quick and meaningful progress.
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.

Mitigating and reducing emissions

While many similar solutions may apply to different companies, each organisation should evaluate and choose those measures that are most relevant to their sector, industry or business.
In general, there are two ways to reduce emissions:

Reduce activities that emit greenhouse gases, for example, by reducing energy consumption, the use of raw materials, or the number of business trips taken by employees.	**Reduce intensity** by choosing services, raw materials, and energy products with lower emission factors, for example, by switching to a green electricity tariff.

Some reduction measures a company may consider include:[3]

Scope 1 + 2	
Use renewable energy sources	by switching to biogas, green electricity, etc.

[3] This overview does not guarantee completeness. Each measure must be assessed for appropriateness to the specific company.

Use more low-emission refrigerants	by switching to ammonia, propane, etc.
Increase energy efficiency	through newer machinery and similar
Optimise processes and products	through new procedures, improved product design and other production activities

Scope 3	
Conserve resources	through avoidance, such as making fewer business trips, using less packaging, producing less waste, etc.
Use more low-emission raw materials	such as plant-based, regional and recycled raw materials
Choose low-emission options for daily activities	such as taking the train instead of flying, using a company bicycle instead of a company car, etc.
Engage with your suppliers	encouraging them to share their knowledge and experience in implementing sustainability practices and solutions
Engage your employees	by offering incentives to implement climate-friendly measures, providing ongoing training opportunities, etc.

Contributing to climate projects

While emission reduction remains crucial in limiting global warming to 1.5 degree target of the Paris Agreement, currently, both government and corporate net zero strategies are not doing enough to keep decarbonisation progress in line. This means that the climate action measures you are implementing today may not have the desired impact or deliver the results the planet urgently requires. Financial contributions to climate projects outside of your company's value chain help tackle those emissions that cannot be avoided at the present time and create a positive impact today.

More than just climate action

Climate projects work in different ways. Some remove CO_2 from the atmosphere (e.g. through reforestation projects), while others prevent further CO_2 emissions (e.g. through the expansion of renewable energy). In addition, these projects promote economic, social, and sustainable development of the region. Each of our projects is certified according to international standards, thus ensuring that they improve the lives of local communities as well as mitigate climate change.

Verified emissions savings

The exact amount of CO_2 saved by each project is verified by independent organisations. 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 not be able to operate without it.
For more information about the climate projects, visit www.climatepartner.com/carbon-offset-projects, or watch a video explaining why financial contribution to these projects can make a difference: http://www.climatepartner.com/thewholejob.

For this carbon footprint, the recommended contribution amount is:[4]

Emission sources	t CO_2
Carbon Footprint	11,773.33
Financial contribution to climate projects incl. 10% safety margin	**12,950.66**

[4] The 10% safety margin is applied to cover the uncertainties in the underlying data that naturally arise from the use of database values and assumptions.

Communicating transparently

From reporting to investors, to press releases, and on-pack consumer messaging, your communication about climate action should be transparent, clear and credible. Read more about how ClimatePartner can help you communicate your impact.

07. Annex 1. Excluded categories

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Scope	Emissions category	Included	Explanation
Scope 1	Stationary Combustion	Yes	
Scope 1	Mobile Combustion	Yes	
Scope 1	Fugitive Emissions	Yes	
Scope 2	Purchased Electricity	Yes	
Scope 2	Purchased Heating	Yes	
Scope 2	Purchased Cooling	Yes	
Scope 3	Purchased goods and services		
	Products	Yes	
	Packaging	Yes	
	Purchased services	No	No data available
	Purchased goods	Yes	
	Food & Beverages	Yes	
	External data center	Yes	
	Water	Yes	
Scope 3	Fuel and energy-related activities (not included in Scope 1 and 2)	Yes	
Scope 3	Upstream Transportation and Distribution		
	Inbound logistics	Yes	
	Intralogistics	No	No emissions to report
	Outbound logistics (upstream)	Yes	
	Storage (upstream)	No	No data available
Scope 3	Waste generated in operations	Yes	
Scope 3	Business travel	No	
	Private & rental vehicles	No	Couldn't retrieve data
	Rail travel	No	No emissions to report
	Flights	Yes	

	Hotel stays	Yes	
Scope 3	Employee commuting	Yes	
Scope 3	Downstream transportation and distribution		
	Outbound logistics (downstream)	Yes	
	Storage (downstream)	No	No data available
Scope 3	End of life treatment of sold products	Yes	

08. Annex 2. Assumptions

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Scope	Emissions category	Assumption
	Inbound logistics	Average market values used for distance.
Scope 3	Employee commuting	Based on average European value. 234 employees working 312 days/year.; Based on average European value. 234 employees working 312 days/year.

09. Imprint

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