ClimatePartner

Corporate Carbon Footprint Report

2024

Altek Metal

2025-06-20

03. Overall results

This is the result of the calculation: **Altek Metal 2024 carbon footprint report** for the time period **2024**:

Scope 1	4,531.96 t CO_2
Scope 2	2,079.06 t CO_2
Scope 3	158,673.59 t CO_2
Overall result	**165,284.61 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

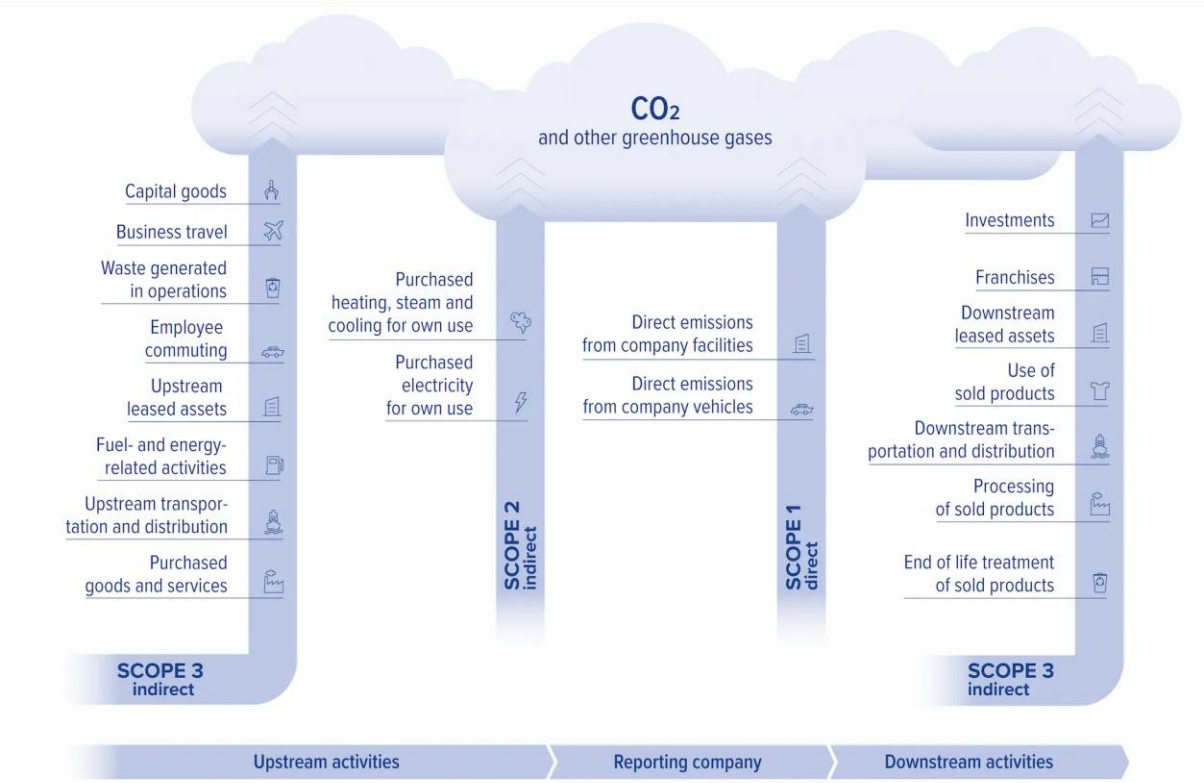
Organisational system boundaries have been established following the operational control approach. Under this approach, a reporting company accounts for 100% of the emissions from operations at which it has the full authority to introduce and implement operating policies.
For this this report, the company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

- Gebze Service Center (Dilovasi)
- Istanbul Office
- Ankara Service Center
- Cerkezkoy Manufacturing & Service Center

[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, Altek Metal 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
Is data provided by suppliers or other value chain partners related to specific activities or emissions in the reporting company's value chain.

Secondary data
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 3.11, Research Paper, 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	97.29%	2.71%
Data share for emission factor data	Scope 3	0%	100%

The results of this report are based on the input data provided by **Altek Metal.** 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 **Altek Metal** 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 **Altek Metal 2024 carbon footprint report** 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

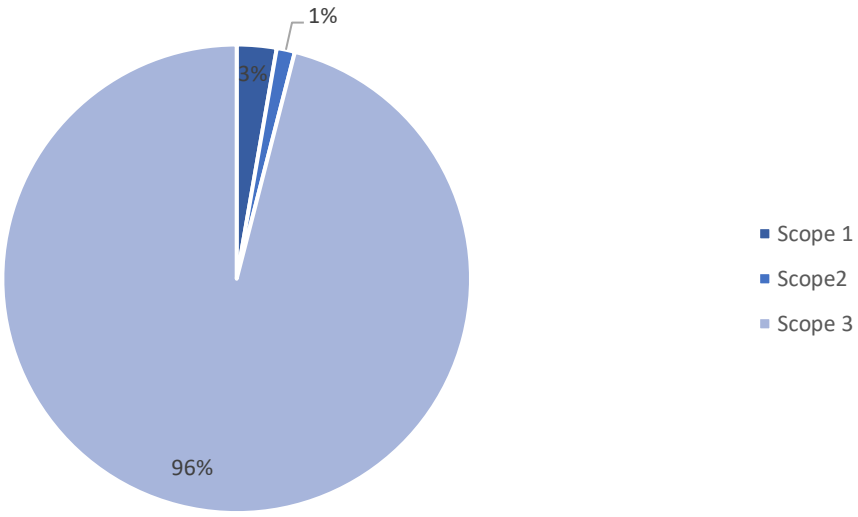
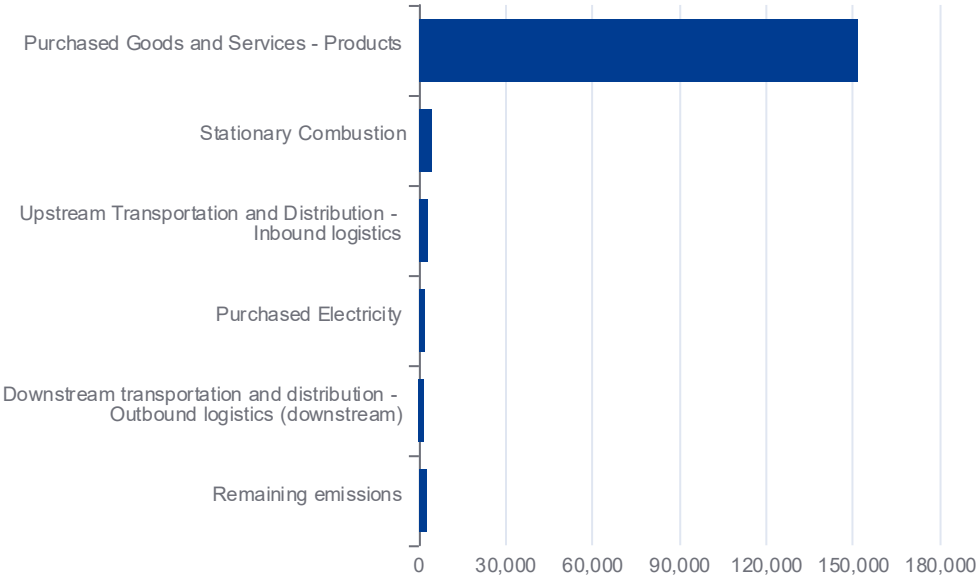


Figure 2. The largest emission sources



Emission sources	t CO_2	%
Scope 1	**4,531.96**	**2.74**
Stationary combustion	4,357.09	2.64
Mobile combustion	174.87	0.11
Scope 2	**2,079.06**	**1.26**
Purchased electricity Calculated using the market-based method	1,996.00	1.21
Purchased heating	83.06	0.05
Scope 3	**158,673.59**	**96.00**
Purchased goods and services	151,814.96	91.85
Fuel- and energy-related activities (not incl. in Scope 1 or Scope 2)	1,566.64	0.95
Upstream transportation and distribution	3,370.72	2.04
Waste generated in operations	0.00	0.00
Business travel	49.65	0.03
Employee commuting	59.96	0.04
Downstream transportation and distribution	1,811.66	1.10

Emission sources	t CO_2	%
End-of-life treatment	0.00	0.00
Overall results	**165,284.61**	

Electricity	t CO_2
Purchased electricity Calculated using the location-based method	1,996.00

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

Emission sources	t CO_2	%
Scope 3	**158,673.59**	**96.00**
Purchased goods and services	151,814.96	91.85
Products	151,531.74	91.68
Packaging	283.19	0.17
Water	0.02	0.00
Fuel- and energy-related activities (not incl. in Scope 1 or Scope 2)	1,566.64	0.95
Upstream transportation and distribution	3,370.72	2.04
Inbound logistics	3,018.91	1.83
Intralogistics	351.81	0.21
Outbound logistics (upstream)	0.00	0.00
Waste generated in operations	0.00	0.00
Business travel	49.65	0.03
Flights	42.51	0.03
Hotel stays	7.13	0.00
Employee commuting	59.96	0.04
Employee commuting and Working from home	59.96	0.04
Downstream transportation and distribution	1,811.66	1.10
Outbound logistics (downstream)	1,811.66	1.10
End-of-life treatment	0.00	0.00
Overall results	**165,284.61**	

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