



Corporate Carbon Footprint Final Report 2025

ZAMET, spol. s r.o.

The ZAMET logo, featuring a red horizontal bar above the word "ZAMET" in blue capital letters. The logo is positioned on a white rectangular background that is part of a larger green geometric design. An orange arrow points to the top left corner of the white background, and a blue starburst graphic is located in the top right corner of the green background.

CONTENTS



About the company

Executive summary

Carbon footprint methodology

Results

GHG Protocol Index

Data quality

About the company

ZAMET, spol. s r.o. is a Czech engineering company based in Nový Hrozenkov that specialises in custom metal fabrication. Its core technologies are laser and plasma cutting, CNC bending and machining, robotic welding and surface finishing, including powder and wet paint shops. Production takes place at four sites: Nový Hrozenkov (head office and production plant), Halenkov and Huslenky.

The vast majority of output consists of semi-finished parts used by customers to assemble machinery and equipment. The principal input is steel, which is also the dominant source of the carbon footprint. The calculation covers Scope 1–3 emissions and provides a basis for identifying emission hotspots and planning reduction measures.

Executive summary



Executive summary

Objectives and results

Project objective

The objective was to determine the carbon footprint of ZAMET, spol. s r.o. for 2025 in accordance with the GHG Protocol, covering Scope 1, Scope 2 and Scope 3.

The calculation covers all four company sites and gives an overview of direct and indirect emissions across energy use, operations and the supply chain. 2025 is the third reporting year, so results are presented as a 2023–2025 series.

Reporting period:	Calendar year 2025
Consolidation approach:	Operational control
Organisational boundary:	Consolidated
Reporting scope:	Scope 1, 2, 3

*Scope 1 covers direct emissions from owned sources, Scope 2 covers indirect emissions from purchased and consumed energy, and Scope 3 covers all other indirect emissions across the value chain.

Results

The total carbon footprint of ZAMET, spol. s r.o. for 2025 is 27,542.20 t CO₂e (location-based), a 15.2% decrease against 2024 (32,475.97 t CO₂e). Scope 1 accounts for 1.6% of the total, Scope 2 for 3.6% and Scope 3 for the remaining 94.8%.

Scope 3 dominates, in particular category 3.1 Purchased goods and services at 86.3% of the total footprint. Raw steel alone accounts for 90.7% of that category, so the footprint is largely driven by the volume of steel processed. Steel consumption fell from 11,240.7 to 9,624.3 tonnes year on year, which explains most of the decrease in the total. Emissions per tonne of steel processed were virtually unchanged (2.889 → 2.862 t CO₂e/t).

Corporate carbon footprint

Overview

	TOTAL FOOTPRINT	PER CZK MILLION OF REVENUE	PER EMPLOYEE
2023	44,482 tCO ₂ e	51.72 tCO ₂ e / CZK m	121.93 tCO ₂ e / employee
2024	32,476 tCO ₂ e	48.20 tCO ₂ e / CZK m	91.60 tCO ₂ e / employee
2025	27,542 tCO ₂ e	50.99 tCO ₂ e / CZK m	83.92 tCO ₂ e / employee

Corporate carbon footprint

Overview by scope

Scope 1

2023	492 tCO ₂ e
2024	556 tCO ₂ e
2025	439 tCO ₂ e

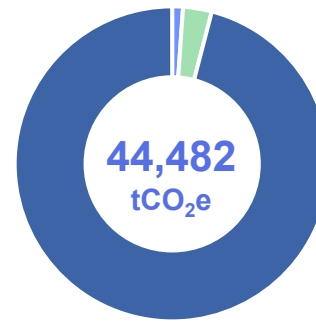
Scope 2

2023	1,312 tCO ₂ e
2024	1,053 tCO ₂ e
2025	1,005 tCO ₂ e

Scope 3

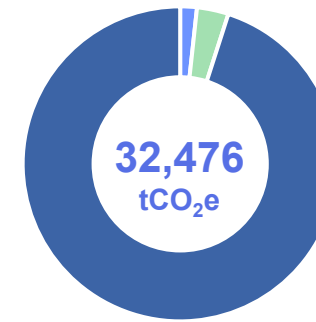
2023	42,677 tCO ₂ e
2024	30,867 tCO ₂ e
2025	26,099 tCO ₂ e

2023



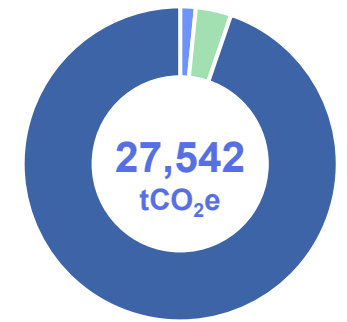
■ Scope 1
■ Scope 2
■ Scope 3

2024



■ Scope 1
■ Scope 2
■ Scope 3

2025



■ Scope 1
■ Scope 2
■ Scope 3

Carbon footprint methodology



Our standards

Greenhouse gas emissions were calculated in accordance with the GHG Protocol and the technical standard ČSN EN ISO 14064-1.



**ACTIVITY
DATA**

X



**EMISSION
FACTOR**

X



GWP

=



CARBON FOOTPRINT

Activity data is a quantitative measure of the level of activity that gives rise to greenhouse gas emissions (e.g. litres of fuel consumed, kilometres driven).

A factor that converts activity data into greenhouse gas emissions (e.g. kg CO₂ emitted per litre of fuel consumed, kg CH₄ emitted per kilometre driven).

A factor describing the heat-trapping effect of one unit of a given greenhouse gas relative to one unit of CO₂ over a 100-year horizon. Multiplying the emissions of a gas by its GWP gives the equivalent CO₂ emissions.

The quantity of greenhouse gases attributable to the company's operations, expressed in CO₂ equivalents (CO₂e).

Operational boundaries

Description of the scopes



SCOPE 1

Direct greenhouse gas emissions arise from sources owned or controlled by the reporting company, for example emissions from combustion in owned or controlled boilers, furnaces and vehicles, or emissions from chemical production in owned or controlled process equipment.



SCOPE 2

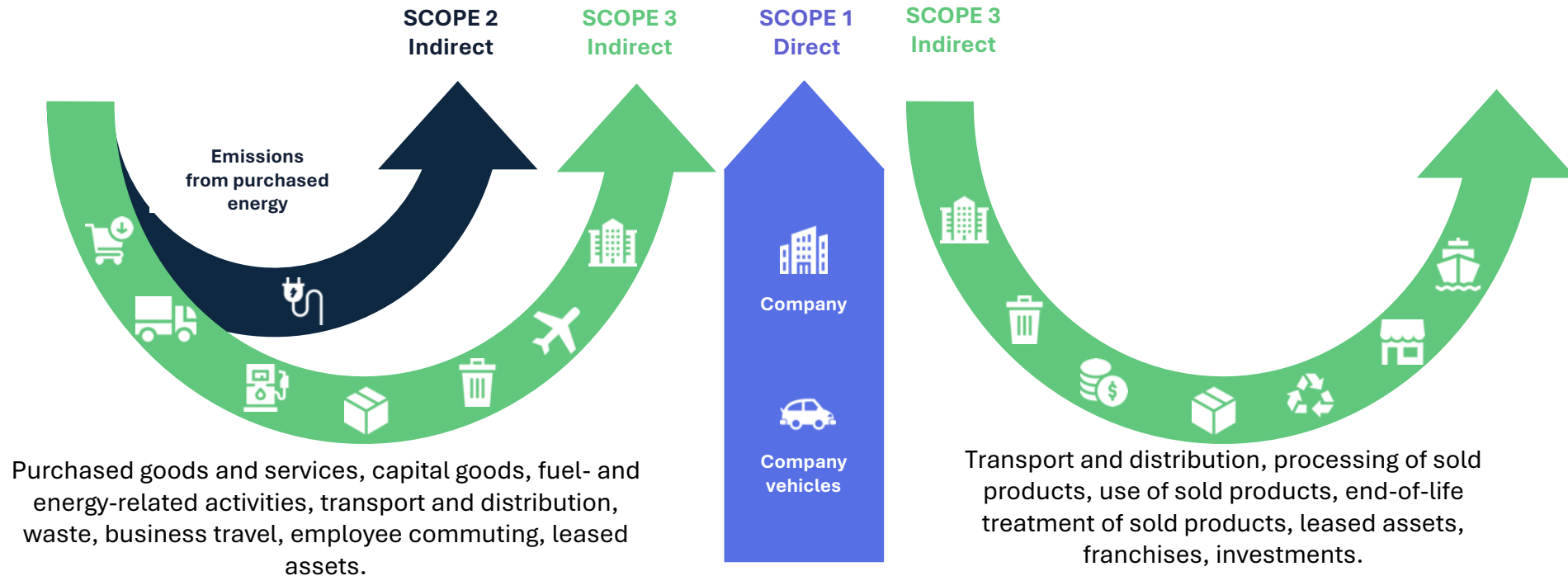
Indirect emissions from the generation of purchased energy. Purchased electricity is defined as electricity bought or otherwise brought into the organisational boundary of the company. In addition to electricity, Scope 2 covers emissions from steam, heat and cooling.



SCOPE 3

Scope 3 is an optional reporting category covering all other indirect emissions that result from the company's activities but arise from sources it neither owns nor controls, such as emissions from logistics or material consumption.

Calculation approach for the carbon footprint



The corporate carbon footprint is calculated from direct and indirect emissions in accordance with the GHG Protocol and the ISO 14064 standards. Greenhouse gas emissions are split into the three scopes defined by the GHG Protocol.

Scope 3 categories (GHG Protocol)

Category	Description	Reason for inclusion / exclusion	Included
1 – Purchased goods and services	Emissions from the production of purchased materials, goods and services.	Included in the calculation	Yes
2 – Capital goods	Emissions from the production of capital goods.	Included in the calculation	Yes
3 – Fuel- and energy-related activities	Emissions from the extraction, production, transport, storage and distribution of fuels and energy not included in Scope 1 or 2.	Included in the calculation	Yes
4 – Upstream transportation and distribution	Emissions from the transport and distribution of purchased products in third-party vehicles. Distribution of all inbound and collected products is counted where the reporting company pays for the service.	Included in the calculation	Yes
5 – Waste generated in operations	Emissions from the disposal and treatment of waste by third parties.	Included in the calculation	Yes

Scope 3 categories (GHG Protocol)

Category	Description	Reason for inclusion / exclusion	Included
6 – Business travel	Emissions from the transport of employees for business purposes in third-party vehicles.	Included in the calculation	Yes
7 – Employee commuting	Emissions from the transport of employees between their homes and their workplaces. Private journeys in company vehicles where the employee pays for the fuel are also included.	Included in the calculation	Yes
8 – Upstream leased assets	Emissions from the operation of assets leased from other entities and operated by the company.	Included in the calculation	Yes
9 – Downstream transportation and distribution	Emissions from the transport and distribution of sold products in third-party vehicles not paid for by the reporting company. Emissions from the point of sale are excluded.	Included in the calculation	Yes
10 – Processing of sold products	Emissions from the processing of intermediate products sold to customers.	Not relevant to the company.	No

Scope 3 categories (GHG Protocol)

Category	Description	Reason for inclusion / exclusion	Included
11 – Use of sold products	Emissions from the use of goods and services sold. Private journeys in company vehicles where the reporting company pays for the fuel are also included.	Not relevant to the company.	No
12 – End-of-life treatment of sold products	Emissions from the disposal and treatment of sold products at the end of their life.	Not relevant to the company.	No
13 – Downstream leased assets	Emissions from the operation of assets owned by the company and leased to other entities.	Not relevant to the company.	No
14 – Franchises	Emissions from the operation of franchises (licences granted to other entities).	Not relevant to the company. The company does not operate franchises.	No
15 – Investments	Emissions associated with investments. This category applies to investors and companies with significant influence over an investee.	Not relevant to the company. No emission-generating investments.	No

Results



Direct emissions

Greenhouse gas emissions in tCO ₂ e			
Category	2023	2024	2025
1.1. Stationary combustion	386.67	446.41	325.06
1.2. Mobile combustion	105.65	109.19	110.89
1.3. Process emissions	–	–	–
1.4. Fugitive emissions	0.00	0.00	2.98
TOTAL	492.33	555.60	438.93

Scope 1 emissions total 438.93 t CO₂e, which is 1.6% of the company’s total carbon footprint in 2025. This is a 21.0% decrease against 2024, driven by lower consumption of natural gas and lignite briquettes in stationary sources.

Scope 1 also covers mobile combustion (company vehicles and materials-handling equipment) and fugitive emissions from refrigerant top-ups. In 2025, 1.95 kg of R-134a refrigerant was added; no refrigerant was added in previous years.

Emissions from purchased energy

Greenhouse gas emissions in tCO ₂ e			
Category	2023	2024	2025
2.1. Purchased electricity (location-based method)	1,312.19	1,053.37	1,004.68
2.1. Purchased electricity (market-based method)	–	–	1,725.88
2.2. Purchased heat, steam and cooling	0.00	0.00	0.00
TOTAL (location-based)	1,312.19	1,053.37	1,004.68

Emissions from purchased energy are determined using the location-based method, and this figure feeds into the total footprint. The 4.6% decrease reflects lower electricity consumption (2,955 MWh against 3,098 MWh in 2024). The Czech grid factor is 0.340 kg CO₂e/kWh, unchanged from 2024.

From 2025 the market-based method is also reported, using the Czech AIB residual mix factor for 2024 (year-1 convention): 1,725.88 t CO₂e.

Note: the market-based method was not reported for 2023 and 2024 and is not calculated retrospectively.

Other indirect emissions

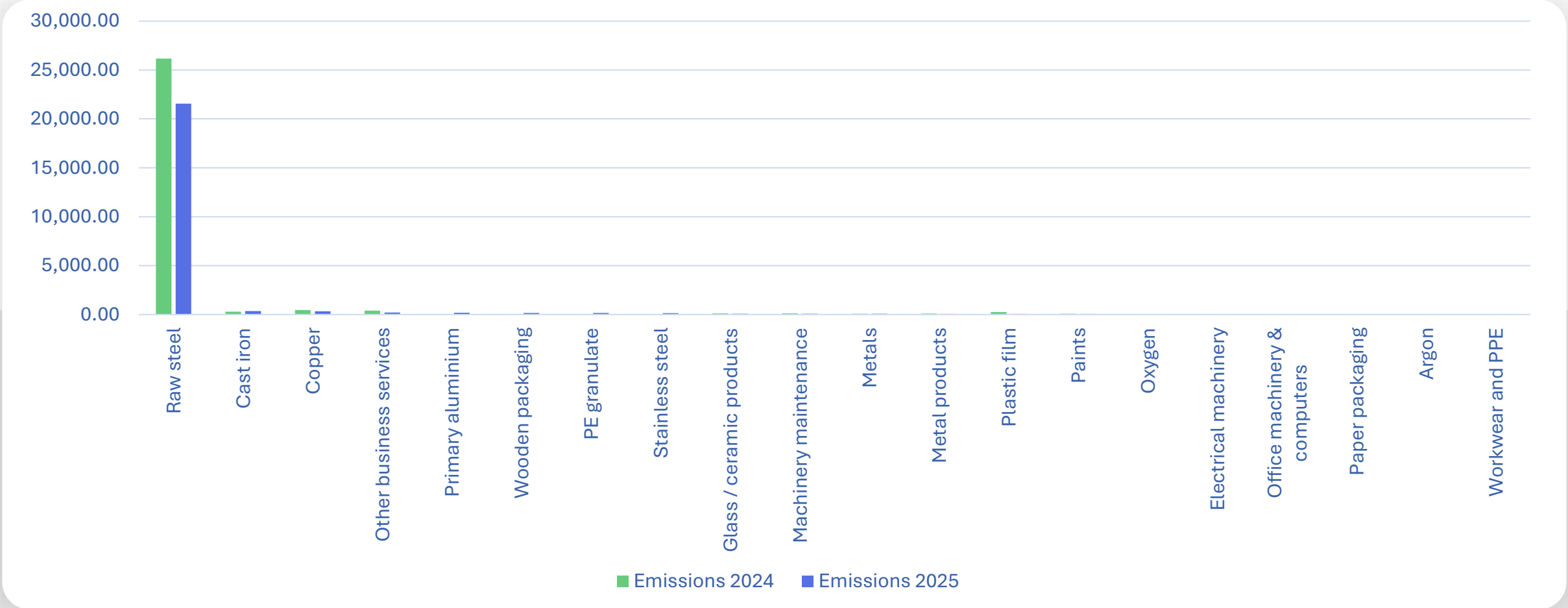
Greenhouse gas emissions in tCO ₂ e			
Category	2023	2024	2025
3.1. Purchased goods and services	39,500.06	28,577.46	23,764.06
3.2. Capital goods	534.92	344.89	147.21
3.3. Fuel- and energy-related activities (not in Scope 1 or 2)	564.42	512.89	493.85
3.4. Upstream transportation and distribution	854.98	506.32	495.72
3.5. Waste generated in operations	214.25	61.14	30.97
3.6. Business travel	4.83	1.16	2.42
3.7. Employee commuting	184.12	166.98	154.59
3.8. Upstream leased assets	–	17.87	14.04
3.9. Downstream transportation and distribution	819.44	678.29	995.74
TOTAL	42,677.03	30,867.00	26,098.59

The largest source of Scope 3 emissions is category 3.1 Purchased goods and services, at 86.3% of the total footprint. A breakdown follows on the next slide.

Next come 3.9 Downstream transport (3.6%), 3.3 Fuel- and energy-related activities (1.8%) and 3.4 Upstream transport (1.8%).

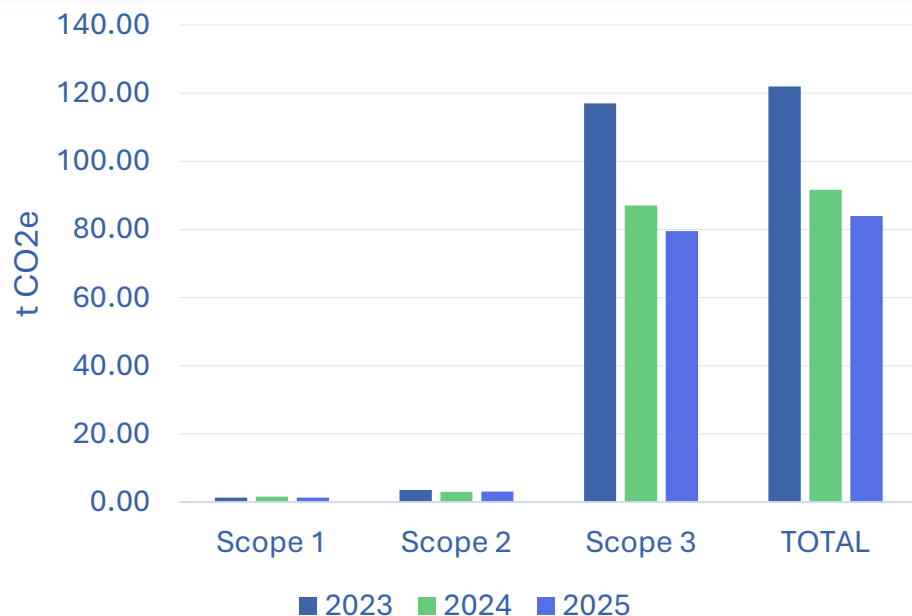
The 46.8% rise in 3.9 is driven by TIR road haulage (+213.4 t) and by air freight, which grew from 3,975 to 65,896 tonne-kilometres (+116.0 t). The 49.4% fall in 3.5 is primarily methodological: it follows from a change in the classification of oil wastes and the associated change of emission factor. Waste volume fell by 15.7%.

Scope 3.1 Purchased goods and services: 20 largest items by emissions (t CO₂e)



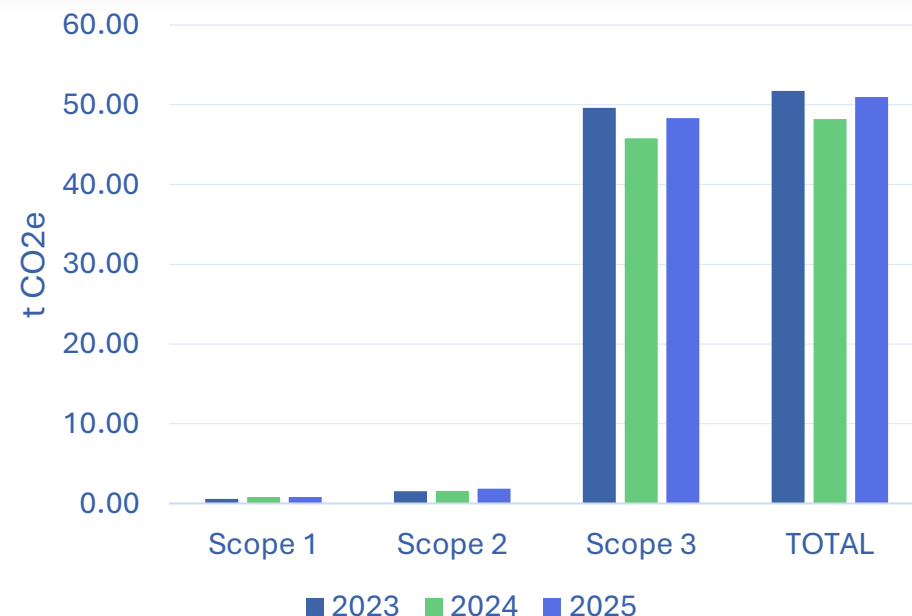
EMISSION INTENSITIES

tCO₂e / year
Per employee*



*Headcount (FTE): 328.20 (2025), 354.55 (2024) and 364.81 (2023).

tCO₂e / year
Per CZK 1 million of revenue



*Revenue: CZK 540 m (2025), 674 m (2024) and 860 m (2023).

Emissions breakdown by site

		Nový Hrozenkov – head office			Huslenky			Nový Hrozenkov – plant			Halenkov – management			Total		
Year		2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025
S1	1.1 Stationary combustion	13.12	11.16	19.14	117.62	78.50	83.49	4.76	117.65	0.00	251.17	239.10	222.43	386.67	446.41	325.06
	1.2 Mobile combustion	1.86	1.73	0.90	6.22	5.67	9.35	0.25	0.83	0.41	97.32	100.96	100.23	105.65	109.19	110.89
	1.4 Fugitive emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98	0.00	0.00	2.98
S2	Purchased electricity (LB)	191.60	165.24	169.32	236.30	183.10	172.59	56.72	39.31	47.07	827.57	665.73	615.70	1,312.19	1,053.37	1,004.68
S3	3.1 Purchased goods and services	–	–	–	–	–	–	–	–	–	80.54	–	–	39,500.06	28,577.46	23,764.06
	3.2 Capital goods	–	–	–	–	–	–	–	–	–	–	–	–	534.92	344.89	147.21
	3.3 Fuel and energy	71.92	67.31	73.13	106.56	86.72	86.63	21.37	34.75	19.49	364.56	324.11	314.60	564.42	512.89	493.85
	3.4 Transport – upstream	–	–	–	–	–	–	–	–	–	–	–	–	854.98	506.32	495.72
	3.5 Operational waste	–	–	–	–	–	–	–	–	–	–	–	–	214.25	61.14	30.97
	3.6 Business travel	–	–	–	–	–	–	–	–	–	–	–	–	4.83	1.16	2.42
	3.7 Employee commuting	–	–	–	–	–	–	–	–	–	–	–	–	184.12	166.98	154.59
	3.8 Leased assets – upstream	–	–	–	–	–	–	–	–	–	–	–	–	–	17.87	14.04
	3.9 Transport – downstream	–	–	–	–	–	–	–	–	–	–	–	–	819.44	678.29	995.74
	TOTAL	278.50	245.44	262.49	466.70	353.99	352.06	83.10	192.54	66.97	1,621.16	1,329.90	1,255.94	44,481.52	32,475.97	27,542.20

Note: Scope 1, Scope 2 and category 3.3 can be broken down by site; the remaining Scope 3 categories are recorded for the company as a whole. Scope 2 is shown on a location-based basis. The 2023 and 2024 figures are taken unchanged from the 2024 report.

Cross-sector benchmarks

Sector	Scope 1 (share)	Scope 2 (share)	Scope 3 (share)	Scope 1 / \$M revenue	Scope 2 / \$M revenue	Scope 3 / \$M revenue	Total t CO ₂ e / \$M revenue
Agriculture, forestry and fishing	3%	18%	79%	45.912	249.633	1,106.625	1,402.170
Mining and quarrying	59%	9%	32%	257.334	38.311	140.342	435.987
Textiles, apparel and leather	3%	8%	89%	48.510	135.650	1,436.164	1,620.324
Wood, straw and paper	11%	18%	70%	70.506	113.654	439.446	623.606
Chemicals	6%	13%	82%	23.062	50.232	324.900	398.194
Equipment, machinery and electronics	7%	12%	80%	65.177	112.776	727.928	905.881
Other manufacturing	8%	8%	85%	92.080	92.080	1,012.245	1,196.405
Construction	9%	5%	86%	64.254	34.729	594.898	693.881
Wholesale and retail trade	2%	3%	96%	24.361	36.011	1,320.502	1,380.874
Transport and storage	17%	19%	65%	139.959	153.793	537.327	831.079
Accommodation and food service	12%	27%	60%	57.753	126.407	278.625	462.785
Information and communication	6%	27%	67%	21.990	103.263	250.599	375.852
Financial and insurance activities	16%	44%	40%	24.604	70.338	63.572	158.514
Real estate activities	6%	13%	81%	57.604	126.556	766.428	950.588
ZAMET, spol. s r.o. (2025)	1.59%	3.65%	94.76%	17.06	39.06	1,014.63	1,070.75

Data quality



Data quality

Types of data used



PRIMARY DATA

- Data from the company's own activities or from activities in its value chain.
- The highest level of accuracy and relevance, particularly for Scope 3 categories.
- In kWh, GJ, litres, tonnes, cubic metres, km...



SECONDARY DATA

- Data that does not come directly from the company's own activities or from activities in its value chain.
- Industry averages, government statistics, academic studies, databases, proxy data, financial data.

In practice a combination was used, depending on data availability.

Data quality

Accuracy of the data used

Calculating a carbon footprint requires a large volume of data from different departments, and its quality varies. Scope 1 and Scope 2, which an organisation usually controls directly, are generally more accurate than the more complex Scope 3, where the company often has no direct access to the data required. The GHG Protocol distinguishes four levels of accuracy; the accuracy generally quoted is around 30%, meaning the actual footprint may lie between 70% and 130% of the calculated value. These accuracy levels are also applied to the emission factors used in the calculation.

Data accuracy level	Technology	Time	Geography	Completeness	Reliability
High	Data obtained using the same technology.	Data less than 3 years old.	Data from the same region.	Data from 100% of sites over a period long enough to even out normal fluctuations.	Verified data based on measurement.
Medium	Data obtained using a similar but different technology.	Data less than 6 years old.	Data from a similar region.	Data from more than 50% of sites over a period long enough to even out normal fluctuations.	Verified data partly based on assumptions, or unverified data based on measurement.
Low	Data obtained using a different technology.	Data less than 10 years old.	Data from a different region.	Data from less than 50% of sites over a period long enough to even out normal fluctuations.	Unverified data partly based on assumptions or on an informed estimate.
Very low	Data from an unknown technology.	Data more than 10 years old or of unknown age.	Data from an unknown region.	Data from less than 50% of sites over a shorter period, or of unknown representativeness.	Unqualified estimate.

Data availability and accuracy

Scope 1&2

	Accuracy level		Comment
	Input data	Emission factor	
1.1. Stationary combustion	High	High	Natural gas and lignite briquette consumption from invoices, DEFRA emission factors. Fuelwood is reported as biogenic emissions outside the scopes.
1.2. Mobile combustion	High	High	Fuel consumption from invoices, by site, DEFRA emission factors.
1.3. Process emissions	–	–	Process emissions are not relevant to the company.
1.4. Refrigerants and fugitive emissions	High	High	Quantity of R-134a refrigerant added, reported by the service provider; GWP per IPCC AR5.
2.1. Purchased electricity	High	High	Electricity consumption from invoices. Location-based using the Czech grid factor, with a supplementary market-based figure from the Czech residual mix (AIB 2024).

Data availability and accuracy

Scope 3

	Accuracy level		Comment
	Input data	Emission factor	
3.1. Purchased goods and services	High	High	A combination of quantity-based and spend-based approaches. Material quantities from internal purchasing records, ECOINVENT and DEFRA factors. Spend-based items make up 2.4% of the category.
3.2. Capital goods	High	Medium	Spend-based data on investments in fixed assets, from the accounting records.
3.3. Fuel- and energy-related activities	High	High	Emission factors for the extraction, production and distribution of the fuels and energy consumed by the company, including distribution losses.
3.4. Upstream transportation and distribution	Medium	High	Tonne-kilometres by mode of transport, DEFRA emission factors.
3.5. Waste generated in operations	High	High	Waste production records by EWC code for 2025, emission factors by treatment method.
3.6. Business travel	Medium	High	Kilometres travelled by mode of transport and nights of accommodation by country.
3.7. Employee commuting	Medium	High	Employee questionnaire survey. The 2024 data was reused for 2025 given the minimal staff turnover.
3.8. Upstream leased assets	High	Medium	Spend-based rental expenditure from the accounting records.
3.9. Downstream transportation and distribution	Medium	High	Tonne-kilometres by mode of transport, DEFRA emission factors.

GHG Protocol Index



GHG Protocol Index

Information	Page
Consolidation approach	5
Organisational boundary	5
Operational boundaries	10
Reporting period	5
Total greenhouse gas emissions	6-7
Relevant indicators	6 and 20
Greenhouse gas emissions – by scope	6-7 and 16-18
Greenhouse gas emissions – by gas	not reported
Greenhouse gas emissions – outside Scope 1, 2 and 3	16
Carbon footprint calculation methodology	8-14



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