CARBON FOOTPRINT OF OSTROJ a.s.

Inventory of Greenhouse Gases for the Year 2023

CONTENTS

GLOSSARY OF TERMS AND ABBREVIATIONS

TERMS:

Decarbonization
Reducing the company's carbon footprint according to the set strategy and goals.

Emissions
For the purposes of this report, these are substances polluting the air.

Emissions Offsets
Quantified reduction of greenhouse gas emissions used to compensate for greenhouse gas emissions emitted by another source.

SCOPE
Division of emissions related to the company's activities according to the GHG Protocol methodology.

GHG Protocol
A set of tools and standards developed to help companies measure, manage, and report greenhouse gas (GHG) emissions associated with their activities.

Greenhouse Gases
Gases that occur in the atmosphere and contribute to the greenhouse effect. The natural greenhouse effect is essential for life on Earth, but higher amounts of greenhouse gases, resulting from company activities, cause global warming.

Carbon Neutrality
A period when a company reports zero carbon dioxide emissions. It is a balance between emitted CO2 and the natural absorption of carbon dioxide.

Company's Carbon Footprint
The sum of the company's emissions from its direct and indirect activities.

ABBREVIATIONS:

WTT - Well-to-Tank (production and distribution of fuels)
T&D - Transmission and Distribution (electricity losses in the grid)
GHG - Greenhouse Gas
CO_2e - Carbon Dioxide Equivalent
LCI - Life Cycle Inventory Analysis
IPCC - Intergovernmental Panel on Climate Change
GWP - Global Warming Potential

1. INTRODUCTION

The company's carbon footprint determines the amount of greenhouse gases created and released into the atmosphere during the company's production activities over a certain period (year) and is typically expressed in CO2e, which includes other emitted greenhouse gases.

For accurate greenhouse gas emission reporting, the GHG Protocol divides emissions related to the company's activities into three areas, known as SCOPE.
SCOPE 1 (direct emissions) – activities that release greenhouse gas emissions directly into the atmosphere and are controlled by the company.
SCOPE 2 (indirect emissions from purchased energy) – Emissions associated with the consumption of purchased energy (electricity, compressed air, heat, steam, or cooling generated from fossil fuel combustion), supplied to the company by its suppliers but resulting from the company's activities. These are indirect greenhouse gas emissions from sources not directly controlled by the company.
SCOPE 3 (other indirect emissions) – Purchased emissions resulting from the company's activities and originating from sources outside the company's control or ownership but not classified as SCOPE 2.

At OSTROJ a.s., we recognize that our environment is fragile, and both individuals and companies play a key role in taking responsibility for their activities that affect it.

We strive to be an environmentally responsible company aware of its activities' negative impact on the environment, continuously implementing measures and investments to increase the sustainability of our practices and processes to gradually minimize these impacts.

Significant measures include implementing solutions that reduce energy and water consumption, minimizing waste production, supporting recycling, and introducing environmentally friendly technologies.

We believe that together with our employees, we can achieve positive changes.

2. ABOUT THE COMPANY

2.1 Description of the Company

The company is one of the most stable firms in the Czech Republic and has been operating in the engineering market since 1948. It is a purely Czech joint-stock company based in Opava.

Table č. 2.1.a: Basic Indicators of OSTROJ a.s.

Indicator	2024	2023
Sales Revenue from Products		1,249,335,000 CZK
Number of Core Employees		750

2.2 Description of Main Activities and Technologies

The source of greenhouse gas emissions for OSTROJ a.s. is the product portfolio of five divisions, which includes a wide range of products and components from mining machines for deep coal and ore mining, special equipment for underground construction, automated conveyor systems, airport equipment, hydraulic cylinders, shafts, printing rollers, machined painted weldments, comprehensive tooling solutions, and precision machined parts to steel die forgings. The production activities also include galvanic zinc and chromium plating.

Production takes place at the company's headquarters. The entire production process begins with the delivery of input materials (mainly metallurgical materials), continues through the actual production, and ends with the product's dispatch to the customer.

2.3 Strategy and Regulations Related to the Carbon Footprint

In 2023, OSTROJ a.s. does not have a strategy or internal regulations related to the carbon footprint, but it is our ambition to continuously strive to reduce emissions in all three areas (SCOPE 1, 2, and 3) using the following principles:

- seeking solutions that lead to meaningful investments in reducing greenhouse gas emissions,
- maintaining a system for annual monitoring and reporting of greenhouse gas emissions,

- striving to foster a positive attitude towards the environment among our employees, business partners, and the public.

3. EMISSIONS REPORTING SYSTEM

3.1 Basic Information

The base year for measuring the company's carbon footprint was chosen as 2023, considering the accuracy and availability of the necessary data for the calculation.

The calculation of the company's carbon footprint was carried out in accordance with ČSN EN ISO 14064-1: 2019 – Greenhouse gases and the GHG Protocol.

All sources of direct and indirect emissions were included in the calculation.

The carbon footprint report of OSTROJ a.s. was not verified by an independent auditor due to the absence of this requirement.

3.1.1 Employee Responsibility for Data Accuracy

The responsibilities of OSTROJ a.s. employees are listed in Appendix No. 1 - Overview of the methodology used for data collection and calculation.

3.1.2 Company Carbon Footprint Calculation Processor

The company chosen for calculating the carbon footprint was ENVIFORM a.s., located at Závodní 814, Staré Město, 73961 Třinec, Company ID: 258 39 047.

3.2 Data Collection Methodology

For data collection, the internal systems of OSTROJ a.s. were primarily used:

- the energy monitoring and control system AYSIS,
- the Envita system for waste management,
- the Carnet vehicle monitoring system,
- the enterprise resource planning system IFS,
- the attendance and personnel system RON.

Records from the company CHLAZENÍ servis s.r.o., located at Krnovská 380/214, 74707 Opava-Jaktař, Company ID: 253 86 198, and internal employee records were used as well.

3.2.1 Unaccounted Emissions

The calculation of the company's carbon footprint does not include emissions from minor material suppliers who deliver in units of pieces or liters and represent less than 1% of the total annual value of input materials, including emissions from the transportation of these input materials. Additionally, emissions from the transportation of products to minor customers, who constitute less than 1% of the annual turnover, are not included.

Obtaining precise data from the above sources would be very challenging; therefore, we have increased these specific sources of emissions within SCOPE 3 by a deviation of 3% according to the permissible methodology.

The use of individual systems and the relevance of data according to individual emission sources are presented in Appendix No. 1 - Overview of the methodology used for data collection and calculation.

3.2.2 Estimated Emissions

Accurate data on emissions generated by our employees commuting to work is currently not feasible to be obtained; therefore, we have chosen an estimation method based on a representative sample.

The use of individual systems and the relevance of data according to individual emission sources are presented in Appendix No. 1 - Overview of the methodology used for data collection and calculation.

3.3 Source of Emission Factors

Most emission factors were taken from the DEFRA 2023 set of emission factors available at https://www.gov.uk.

For electricity, the emission factor published by the Ministry of Industry and Trade of the Czech Republic (location-based) and the Association of Issuing Bodies (residual market-based) was used.

For material inputs, the characterization (using the IPCC GWP100a method) of unit processes from the Ecoinvent 3 LCI database, obtained from an external consulting company, was used.

The use of individual sources of emission factors is presented in Appendix No. 1 - Overview of the methodology used for data collection and calculation.

4. COMPANY CARBON FOOTPRINT RESULT

4.1 Company Carbon Footprint Result

Greenhouse gas emissions for the period of 2023.

Total Emissions	**63 140 t CO_2e**
SCOPE 1	1 523 t CO_2e
SCOPE 2	9 272 t CO_2e
SCOPE 3	52 345 t CO_2e

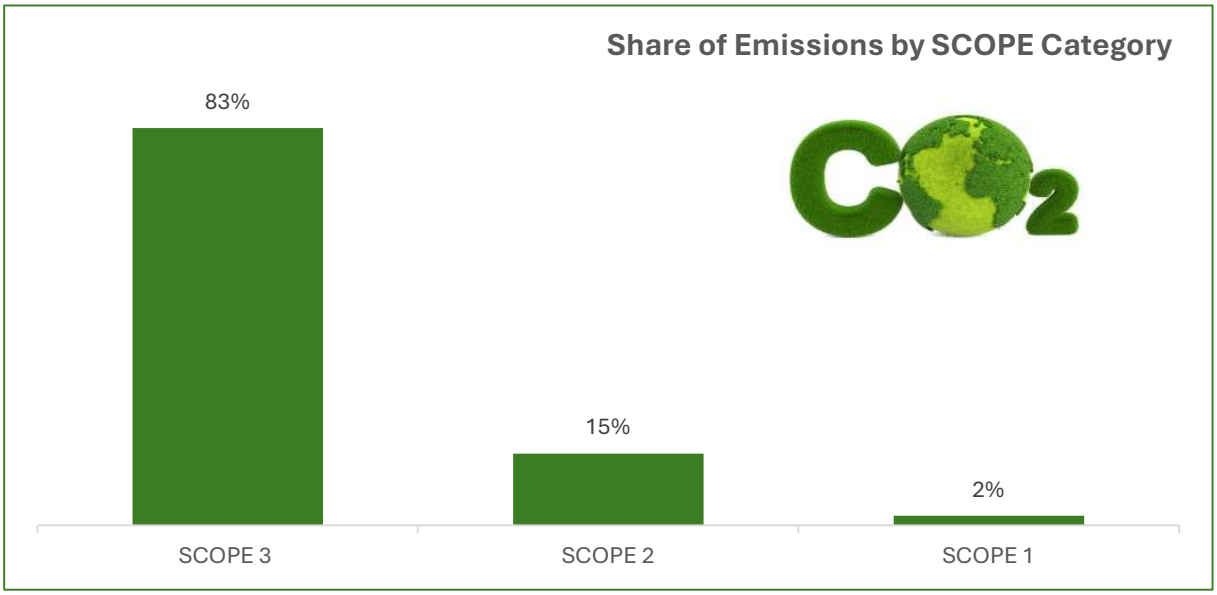
TOP 5 Emission Sources	
Material	48 882 t CO_2e
Electricity	9 272 t CO_2e
WTT a T&D	2 476 t CO_2e
Natural Gas	1 315 t CO_2e
Product Transportation	495 t CO_2e

For the conversion to declared units, indicators from Table No. 2.1.a: Basic Indicators of OSTROJ a.s. were used.

Carbon Footprint per Employee	Carbon Footprint per 1 million CZK
84,2 t CO_2e	50,5 t CO_2e

4.2 Analysis of the Company's Carbon Footprint Result

The GHG Protocol methodology divides emissions into three categories (SCOPEs).

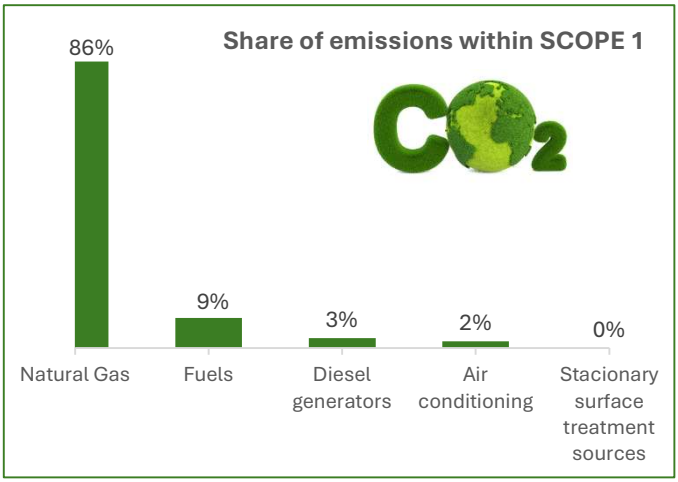


4.2.1 SCOPE 1 Emissions

In the SCOPE 1 emissions category, emissions from the consumption of natural gas in heat production facilities, most commonly condensing gas boilers or so-called dark radiators, dominate. The second place is occupied by emissions from diesel consumption in company vehicles.

For emissions from stationary air pollution sources (emissions of volatile organic compounds (VOC)) that arise during the application of coatings in the paint shop and for emissions from stationary air pollution sources (emissions of nitrogen oxides (NOx) and emissions of hydrogen chloride (HCl)) that arise from the operation of the galvanizing line, an emission factor of 0 was used due to the fact that it is not possible to determine the share of nitrous oxide (N2O) as a greenhouse gas for these specified types of emissions.

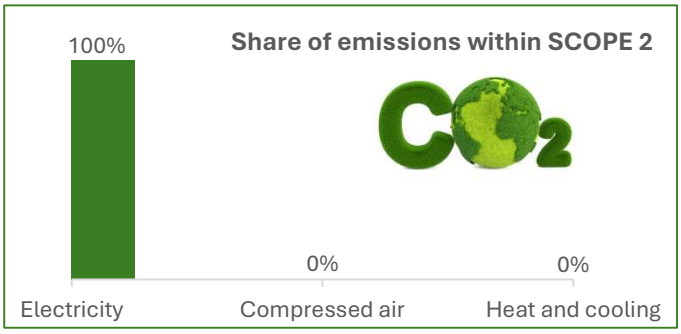
SCOPE 1	1 523 t CO_2e
Natural Gas	1 315 t CO_2e
Fuels	143 t CO_2e
Diesel generators	41 t CO_2e
Air conditioning	24 t CO_2e
Stacionary surface treatment sources	0 t CO_2e



4.2.2 SCOPE 2 Emissions

In this emissions category, OSTROJ a.s. only monitors emissions from the purchase of electricity. OSTROJ a.s. does not purchase commodities such as compressed air, heat, or cooling.

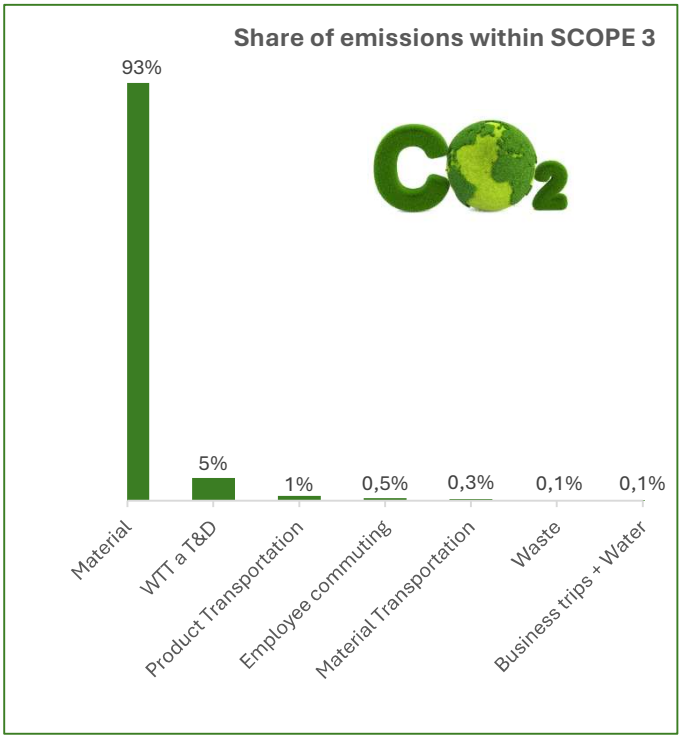
SCOPE 2	9 272 t CO_2e
Electricity	9 272 t CO_2e
Compressed air	0 t CO_2e
Heat and cooling	0 t CO_2e



4.2.3 SCOPE 3 Emissions

For emission sources that do not have a primary calculation, a 3% increase in CO2e emissions was added. In the SCOPE 3 emissions category, emissions from the purchase of input materials, specifically metallurgical materials, dominate. Additionally, emissions from electricity losses in the network (T&D) are included.

SCOPE 3	52 345 t CO_2e
Material	48 882 t CO_2e
WTT a T&D	2 476 t CO_2e
Product Transportation	495 t CO_2e
Employee commuting	260 t CO_2e
Material Transportation	154 t CO_2e
Waste	50 t CO_2e
Business trips	23 t CO_2e
Water	5 t CO_2e



In the following periods, the company's carbon footprint will be compared annually to the base year, i.e., 2023.

Table No. 4.2.3.a: Year-on-Year Comparison

	2024	Difference in %	2023
SCOPE 1			1 523 t CO_2e
SCOPE 2			9 272 t CO_2e
SCOPE 3			52 345 t CO_2e
Total Emissions			**63 140 t CO_2e**
Carbon Footprint per Employee			**84,2 t CO_2e**
Carbon Footprint per 1 million CZK			**50,5 t CO_2e**

5. DECARBONIZATION STRATEGY

At OSTROJ a.s., we continuously strive to reduce greenhouse gas emissions by planning and implementing investments that impact energy savings, investments in the modernization of machinery and vehicle fleets, or investments in software that help improve and refine data collection. These investments are discussed and approved annually as part of the three-year strategic business plan by the board of directors of OSTROJ a.s.

However, these investments represent only one of many steps on the path to the company's carbon neutrality. OSTROJ a.s. supports the international commitment arising from the Paris Agreement on climate change, but in the field of the engineering industry in which the company operates, we currently have limited options to achieve our own carbon neutrality in the short term.

At OSTROJ a.s., we understand the significance and necessity of a decarbonization strategy, which enables company management to better adapt to future mandatory requirements and regulations, reduce business risks associated with climate challenges, and, last but not least, achieve cost savings. Therefore, the company management has decided to incorporate the decarbonization strategy into the three-year strategic business plan, effective from 2025.

5.1 Demonstrated Reduction of the Company's Carbon Footprint

This year, the first calculation of the carbon footprint was carried out, which defined the areas where goals will be set, and their demonstrated achievement will be evident in the following periods.

5.2 Emissions Offsets

At OSTROJ a.s., we perceive emission offsets as one of the ways to achieve the company's carbon neutrality. However, we are currently not considering their use due to the absence of offsetting rules. Our primary effort will be to reduce the company's carbon footprint through energy savings, investments in new technologies, or improving the accuracy of reported data.

5.3 Company Carbon Footprint Reduction Goals

The carbon footprint reduction goals are set with regard to the areas that OSTROJ a.s. can influence.

Table No. 5.3.a: List of goals for reducing the company's carbon footprint

1. Energy savings
2. Purchase of so-called green energy
3. Reduction of emission estimates and calculations
4. Optimization of waste production

5.4 Action Plan for Reducing the Company's Carbon Footprint

The action plan for reducing the company's carbon footprint is based on the goals set out in section 5.3 and takes into account the feasible options for the company.

Table No. 5.4.a: List of planned actions to reduce the company's carbon footprint

	Activity	Time Horizon
1.	Modification of transformer stations	2025-2029
2.	Procurement of part of the electricity from certified green energy	2030
3.	Refinement of SCOPE 3 emission data	ongoing
4.	Reduction of printing by converting documents to electronic form	ongoing

6. EVALUATION

Not only in the engineering industry, the question often arises whether it is possible to combine business success and company growth with success in reducing the environmental impact of the company's activities.

At OSTROJ a.s., we believe that where there is a will, there is a way to achieve the set goals. Therefore, we are publishing the OSTROJ a.s. Carbon Footprint Report for the first time this year, with the aim of providing the public and business partners with an overview of the environmental impact of our activities in the form of direct and indirect greenhouse gas emissions, and declaring our approach to managing them.

Among other activities that are not directly measurable, but are perceived as part of our contribution to environmental protection, is the establishment of meadow lawns on land owned by our company. Mowing is carried out only twice a year with regard to biodiversity protection, and because insects and plants undoubtedly belong together, the company management decided in 2023 to establish a company beekeeping farm .

We are firmly convinced that a lasting contribution to environmental protection is primarily the spread of awareness about responsible behavior among our employees. Therefore, the company management has committed to sharing of information about sustainability and ecology with our employees as a part of the regular internal communication.

Any questions, ideas, and insights regarding the sustainability of our business and our approach to environmental protection are welcome at the email address esg@ostroj.cz, which is also listed on our website.

Appendix 1 - Overview of the Methodology Used for Data Collection and Calculation

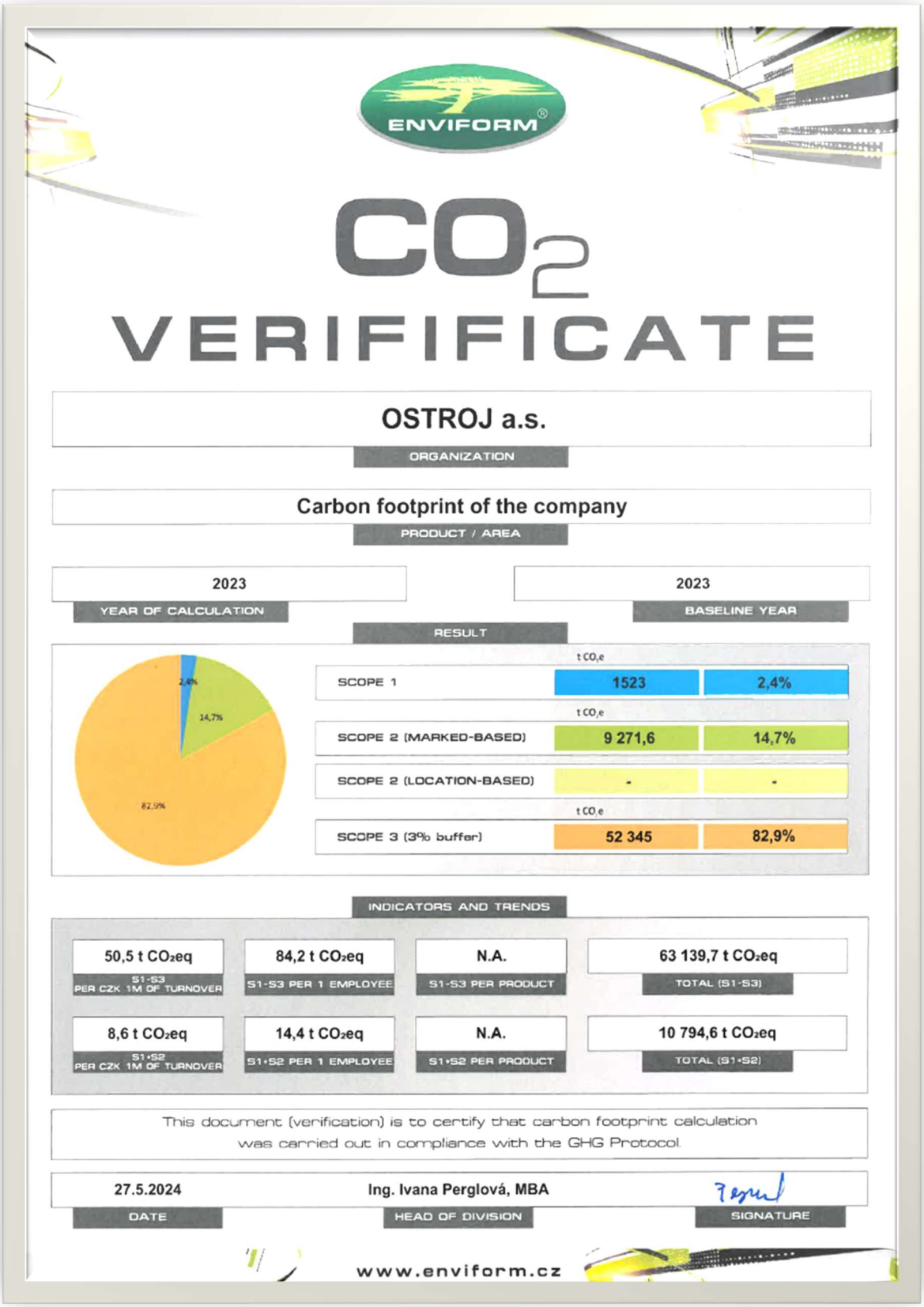
Emissions Source	SCOPE	Explanation	Data Collection Methodology	Data Calculation Methodology	Responsibility	Source of Emission Factor
Natural Gas	1	Emissions from fuel consumption in heat production facilities.	AISYS system	primary (accurate)	Energy Manager	DEFRA
Diesel for electricity generation	1	Emissions from diesel consumption in diesel generators.	IFS system	primary (accurate)	Energy Manager	DEFRA
Fuels	1	Emissions from fuel consumption in company vehicles that the company owns directly or leases.	Carnet system	primary (accurate)	Fleet Manager	DEFRA
Air conditioning	1	Emissions from the consumption of fluids in air conditioning systems in buildings, production facilities, or vehicles.	records from the company CHLAZENÍ a servis s.r.o.	primary (accurate)	Head of Property Management	DEFRA
Stationary sources	1	Emissions from the application of coatings in the paint shop (VOC), emissions from the operation of the galvanizing line (NOx, HCl).	internal employee record	primary (accurate)	Environmental Manager	DEFRA
Electricity	2	Emissions from purchased electricity consumed by the company.	AISYS system	primary (accurate)	Energy Manager	AiB - OTE MPO
Heat and cooling	2	Emissions from the production of heat and cooling purchased by the company.	OSTROJ a.s. does not implement	x	x	x
Compressed air	2	Emissions from compressed air purchased by the company.	OSTROJ a.s. does not implement	x	x	x
Material	3	Emissions associated with the input materials purchased by the company.	IFS system	secondary (calculated)[1]	Head of Procurement	DEFRA Ecoinvent
Material Transportation	3	Emissions associated with the transportation of input materials to the company, purchased by the company.	IFS system	secondary (calculated)[2]	Head of Warehouse Management and Cutting Department	DEFRA

Product Transportation	3	Emissions associated with the transportation of products to customers, purchased by the company.	IFS system	secondary (calculated)[3]	Head of Warehouse Management and Cutting Department	DEFRA
Business Trips	3	Emissions associated with employee business trips, including overnight stays in hotels.	RON system	primary (accurate)	Process Manager	DEFRA
Employee commuting	3	Emissions associated with employees commuting to OSTROJ a.s.	RON system	secondary (calculated)[4]	HR Manager	DEFRA
Waste	3	Emissions associated with transportation for processing and emissions associated with the actual processing/disposal process (landfilling/recycling/incineration).	Envi system	primary (accurate)	Environmental Manager	DEFRA
Water	3	Emissions from the consumption of drinking water and emissions from wastewater management.	AISYS system	primary (accurate)	Energy Manager	DEFRA
WTT a T&D	3	Emissions associated with fuel and energy losses.	AISYS system	primary (accurate)	Energy Manager	DEFRA

Notes:

1) *Suppliers of input materials were chosen based on significance, i.e., 1% of the total annual value of input materials. For the year 2023, service providers and suppliers delivering in units of "pieces" and "liters" are not included in the calculation due to their minor representation.*
2) *The number of deliveries was optimized according to the actual weight of the load and the most commonly used truck (25t). For the route length calculation, only the route from the most significant suppliers (i.e., over 1% of the annual value of input materials) was chosen.*
3) *The number of shipments was optimized according to the actual weight of the load and the most commonly used truck (25t). For the route length calculation, only the route to the most significant customers (i.e., over 1% of annual turnover) was chosen.*
4) *The representative sample included employees who have a personal vehicle registered in the RON system. For the route length calculation, only the route to OSTROJ a.s. was chosen. The representative sample was recalculated to the total number of employees.*

Appendix 2 – Certificate of the Company's Carbon Footprint



ENVIFORM®

CO_2 VERIFICATE

OSTROJ a.s.

ORGANIZATION

Carbon footprint of the company

PRODUCT / AREA

2023	2023
YEAR OF CALCULATION	BASELINE YEAR

RESULT

	t CO_2e	
SCOPE 1	1523	2,4%
SCOPE 2 (MARKED-BASED)	9 271,6	14,7%
SCOPE 2 (LOCATION-BASED)	-	-
SCOPE 3 (3% buffer)	52 345	82,9%

INDICATORS AND TRENDS

50,5 t CO_2eq	84,2 t CO_2eq	N.A.	63 139,7 t CO_2eq
S1-S3 PER CZK 1M OF TURNOVER	S1-S3 PER 1 EMPLOYEE	S1-S3 PER PRODUCT	TOTAL (S1-S3)
8,6 t CO_2eq	14,4 t CO_2eq	N.A.	10 794,6 t CO_2eq
S1+S2 PER CZK 1M OF TURNOVER	S1+S2 PER 1 EMPLOYEE	S1+S2 PER PRODUCT	TOTAL (S1+S2)

This document (verification) is to certify that carbon footprint calculation was carried out in compliance with the GHG Protocol.

27.5.2024	Ing. Ivana Perglová, MBA	
DATE	HEAD OF DIVISION	SIGNATURE

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