

Carbon footprint calculation report of the company

BV elektronik s.r.o.
per year 2024

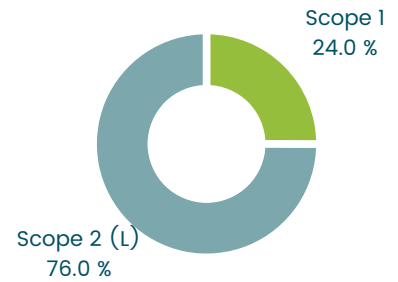
Company **BV elektronik s.r.o.** (IČO: 60468173) with headquarters in V luhu 715/6 Praha had **on 27. 2. 2025** a simplified report of its own **carbon footprint for the year 2024 generated**. The calculator for calculating the carbon footprint is managed by CI3 s.r.o. The responsibility for the correctness of the data is on the filling company's side.

Total Company carbon footprint is 1 436.6 t CO₂e
(Scope 1 a 2 by method Market based).

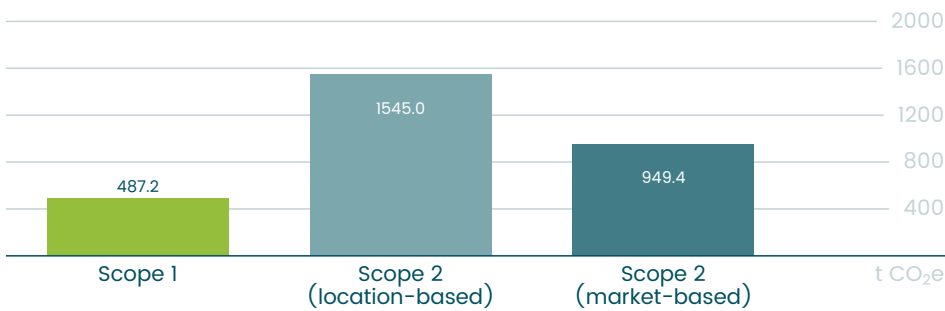
Division of emissions by Scopes

Scope	location based		market based	
Scope 1	487.202 t CO ₂ e	24.0 %	487.202 t CO ₂ e	33.9 %
Scope 2	1 544.952 t CO ₂ e	76.0 %	949.358 t CO ₂ e	66.1 %
Total	2 032.154 t CO ₂ e	100.0 %	1 436.560 t CO ₂ e	100.0 %
Scope 1+2	2 032.154 t CO ₂ e	100.0 %	1 436.560 t CO ₂ e	100.0 %

Location-based emissions



Structure of emissions by Scopes

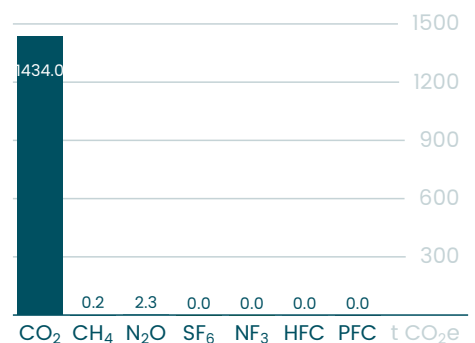
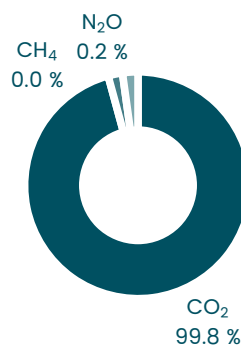


Market-based emissions

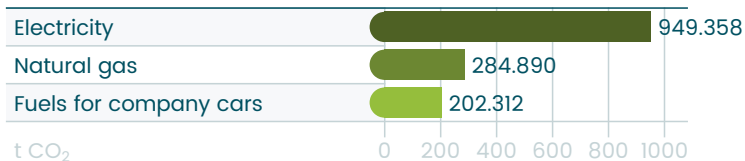


Division of emissions by gases

Gas	t	t CO ₂ e	Share
CO ₂	1 434.031	1 434.031	99.8 %
CH ₄	0.007	0.182	0.0 %
N ₂ O	0.009	2.346	0.2 %
SF ₆	0.000	0.000	0.0 %
NF ₃	0.000	0.000	0.0 %
HFC	0.000	0.000	0.0 %
PFC	0.000	0.000	0.0 %



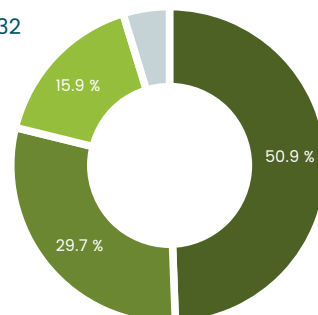
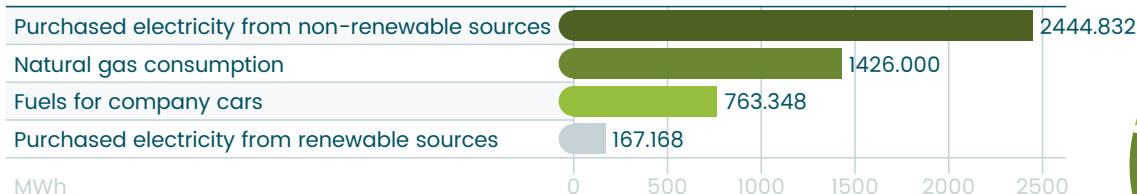
Emissions broken down by functional unit



Emissions distribution in Scope 3

Kategorie	t CO ₂ e
3.1 Purchased goods and services	0.000
3.2 Investment equipment	0.000
3.3 Energy and fuel losses	0.000
3.4 Upstream transport	0.000
3.5 Water and waste	0.000
3.6 Business trips and accommodation	0.000
3.7 Employee commuting	0.000
3.8 Upstream rental	0.000
3.9 Downstream transport	0.000
3.10 Processing of sold products	0.000
3.11 Use of sold products/services	0.000
3.12 Disposal of products	0.000
3.13 Downstream rental	0.000
3.14 Franchises	0.000
3.15 Investment	0.000

Energy consumption



Comparison of the total carbon footprint

The company's carbon footprint per year 2024 (in total 1 436.6 t CO₂e) is comparable, for example, to the footprint of some of the following activities:



year use of

532

average cars



return flight

653

from London to New York



production and serving of

200

thousands of portion of beef meat



production and use

20 821

mobile phones iPhone 13



consumption of energy in

528

average households in EU for 1 year

Selected emission intensity indicators

Indicator	Scope 1 + 2	Units
Emissions per revenue	53.763	t CO ₂ e / mil. EUR
Emissions per employee	4.225	t CO ₂ e / FTE
Emissions per area	0.123	t CO ₂ e / m ²

Footprint per one employee

4.23

t CO₂e

Footprint per one million EUR of turnover

53.76

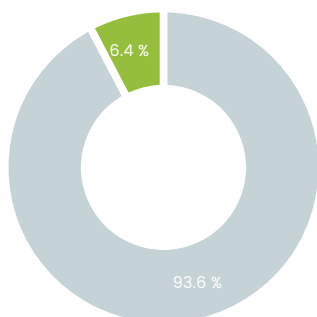
t CO₂e

Footprint per one square meter

0.12

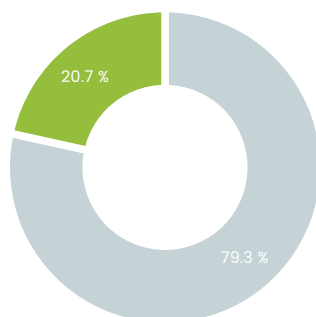
t CO₂e

Selected additional indicators



6.4 %

Share of electricity sourced from renewable sources



20.7 %

Share of electrified vehicles

Explanations

Greenhouse gases are gases that occur in the Earth's atmosphere and contribute to the greenhouse effect. On the one hand, they are of natural origin (such as water vapor, methane), and on the other hand, they are released by human activities (mainly by burning fossil fuels, but also by a number of other activities). The GHG Protocol (see below) records a total of seven anthropogenic greenhouse gases that are relevant in terms of the carbon footprint. These are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur fluoride (SF₆) and nitrogen fluoride (NF₃). Carbon dioxide covers all greenhouse gases and we can convert them to it. We then talk about carbon dioxide equivalents (CO₂e).

Global warming potential (GWP) indicates the extent of the potential contribution of a given greenhouse gas to the greenhouse effect. A unit is the contribution to the greenhouse effect of one molecule of CO₂. Using these coefficients, it is possible to determine the so-called CO₂ equivalent, i.e. the amount of CO₂ that would have an equivalent contribution to the greenhouse effect of the atmosphere equal to the given amount of the relevant gas. It usually refers to a time horizon of 100 years.

GHG Protocol (GHGP) is the global standard for measuring, managing and publishing greenhouse gas emissions. It was developed by the international organization [World Resources Institute \(WRI\)](#) a [World Trade Council for Sustainable Development \(WBCSD\)](#).

Scope 1. Direct emissions of greenhouse gases into the atmosphere, which arise from activities that directly fall under the given company and are simultaneously controlled by it. These include, for example, emissions from boilers or generators burning fossil fuels in the company, emissions from mobile sources (e.g. cars) owned by the company, leakage of refrigerants from refrigeration equipment or emissions from industrial processes (e.g. cement production) or emissions from waste water treatment in facilities operated by the company.

Scope 2. Indirect emissions of greenhouse gases associated with the consumption of purchased energy (electricity, heat, steam or cooling), which do not arise directly in the company, but are a consequence of the company's activities. These are indirect emissions from sources that the company does not directly control, yet it has a fundamental influence on their size.

Scope 3. Indirect emissions of greenhouse gases that are a consequence of the company's activities and that arise from sources outside the control or ownership of the company, but are not classified as Scope 2 (e.g. business trips by plane, landfilling, purchase and transport of material by a third party, etc.). The GHG Protocol is divided into fifteen subcategories, which as a whole may not be relevant for all companies.

Emission factors express the amount of greenhouse gases in tons of carbon dioxide or other greenhouse gases related to a unit of energy or use another unit expression (per mass or volume of the product).

Location-based the method expresses one of two ways of reporting electricity consumption and subsequent emissions, where the national or locally appropriate fuel mix of electricity production and the corresponding emission factor are used to determine emissions from electricity consumption. The emission factor can thus change from year to year depending on the type and quantity of electricity generation sources connected to the energy network.

Marked-based the method is the second way of reporting electricity consumption and subsequent emissions, where the calculation uses the energy mix corresponding to the company's contracts with electricity suppliers. Even this emission factor can change from year to year depending on the type and quantity of electricity purchased and consumed by suppliers.

Upstream emissions arise during the production of goods or services that a company purchases or uses. For example, if a company uses plastic to make its products, the emissions resulting from the production and transportation of that plastic would be upstream emissions.

Downstream emissions are the result of the use or disposal of companies' products or services. For example, if a company manufactures machinery, the emissions that result from the use of that machinery would be considered downstream emissions.

Input values

1. Basic information

1.1.1	Region	Czech Republic
1.1.2	ID	60468173

2. Business information

2.1	Calculation year	2024
2.2	Annual turnover	26 720 000 EUR
2.3	Subject of business activity and share - S - Other services activities	100 %
2.4	Number of employees	340 pers.
2.5	Floor area	11 709 m ²

4. Electricity

4.1.1.2	Standard electricity tariff in Czechia	2 612 MWh
4.4.2	I know fuel mix from supplier - Fuel mix for electricity in the Czech Republic (IPCC - original - Other)	0.3 %
4.4.2	I know fuel mix from supplier - Fuel mix for electricity in the Czech Republic (IPCC - original - Renewables)	6.4 %
4.4.2	I know fuel mix from supplier - Fuel mix for electricity in the Czech Republic (IPCC - original - Natural gas)	5.8 %
4.4.2	I know fuel mix from supplier - Fuel mix for electricity in the Czech Republic (IPCC - original - Nuclear)	42.8 %
4.4.2	I know fuel mix from supplier - Fuel mix for electricity in the Czech Republic (IPCC - original - Coal)	44.7 %

5. Gas and other fuels

5.1.1	Consumption of natural gas.	1 426 MWh
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6. Company cars

6.1.1	Number of company vehicles - Forklifts with combustion engine	5 pcs
6.1.1	Number of company vehicles - Forklifts with electric engine	12 pcs
6.1.1	Number of company vehicles - Lorry truck	2 pcs
6.1.1	Number of company vehicles - Car with combustion engine	39 pcs
6.2.1.1	I know exact consumption of fuels in company cars - Fuels - Diesel	75 609 l

Calculation methodology

The calculation of greenhouse gas emissions was carried out on the basis of the technical standard ČSN EN ISO 14064-1 and the international standard GHG Protocol (GHGP). The used global warming potential values (GWP) were taken from the last, sixth (AR6), assessment report of the Panel on Climate Change (IPCC) under the UN.

Greenhouse gas	GWP	Reference
CO ₂ (carbon dioxide)	1.0	IPCC Sixth Assessment Report (AR6 - 100 years)
CH ₄ (methane)	27.9	IPCC Sixth Assessment Report (AR6 - 100 years)
N ₂ O (nitrous oxide)	273.0	IPCC Sixth Assessment Report (AR6 - 100 years)
HFC (fluorinated hydrocarbons)	100–14 800	IPCC Sixth Assessment Report (AR6 - 100 years)



Emission factors were taken or calculated from the following documents and sources - National inventory reports of NIR, ČHMÚ, UK Government GHG Conversion Factors for Company Reporting, Agence de la transition écologique (ADEME), Association of Issuing Bodies, Furniture Industry Research Association, Carbon Trust, Low Carbon Vehicle Partnership, Veolia and Ecoinvent databases. If a specific emission factor was not available, it was estimated based on the experience of CI3, s.r.o. employees.

The uncertainty of emission factors in Scope 1 and 2 ranges from 1.0 to 4.5 %. For items in Scope 3, it can reach up to 50 % due to the merging of different items into one group or non-existent specific emission factors from individual suppliers. Of the greenhouse gases, only CO₂, CH₄, N₂O and HFC are considered, and within the category of Scope 3, only the following areas are considered: purchased goods, investment goods, activities related to fuels and energy, upstream transport and distribution, generated waste, business trips, employee commuting and downstream transportation and distribution.

The calculation coefficients have been updated 27. 2. 2025, the report was generated by CarbonFix version 1.2.7a on day 27. 2. 2025.



CarbonFix je verifikován společností SGS dle normy ISO 14064-3.

Information about the processor – CI3, s. r. o.

CI3, s. r. o. is a sister company of a publicly beneficial company CI2, o. p. s., which is mainly concerned with determining the carbon footprint. In this area, it focuses on determining the company carbon footprint (Company Carbon Footprint), determining the product carbon footprint (Product Carbon Footprint) and verifying the carbon footprint according to the technical standards of the ISO 14064 series and the international GHG Protocol standard. CI3, s.r.o. is a silver accredited partner of the international organization CDP.

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