



**CARBON  
FOOTPRINT  
CALCULATOR**

Calculation generated

on: 13/11/2024

# Carbon footprint calculation report **Buglo Play Sp. z o.o** for the year 2023

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This report was generated with the carbon footprint calculator.

The calculation was prepared based on emission indicators available in 2023.

Tool's partner



The project was  
created thanks to  
collaboration with





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# Introduction

Dear Sirs/Madams,

This report is a vital step towards reduction of your company's carbon footprint.

We hope that the data and the recommendations obtained with our carbon footprint Calculator will facilitate your emission management and reduction and will make your company more climate competitive.

Our tool was developed by a team of experts familiar with both the climate context as well as the reality of doing business in Poland, so that we can facilitate your further efforts towards low-emission operation and meeting the requirements of the market in terms of mitigating the effect business has on the climate change.

The calculation method implemented in our Calculator is GHG Protocol compliant and the emission index base comes from internationally recognised data bases and is regularly updated. The tool conforms to the following standards and initiatives: CDP, SBTi and PCAF.

Should you wish to discuss the results presented in the report with our experts, you are welcome to [contact us](#). Please consider following our [social media](#) and our [web page](#).

Green Regards,

**Climate&Strategy Team**



# Climate&Strategy Foundation

Climate&Strategy Foundation (formerly Climate Strategies Poland) is a not-for-profit organisation. Through our work, we want to see a shift from making climate friendly declarations to implementing concrete emission reduction measures. We calculate carbon footprint for companies, services, products and events.

Our team includes seasoned experts and we have deep understanding of the climate context in Poland combined with realistic understanding of the business context. We work closely with global organisations specialising in carbon footprint reporting as well as decarbonisation strategies, such as CDP and SBTi. Our Foundation supports its partners in calculations, development of reduction strategies, selection of emission compensation strategies as well as communication.

Foundation's statutory objectives include the following: education in terms of reduction of carbon footprint and environmental impact, supporting local governments and organizations in terms of expanding environmental awareness.

We promote climate change awareness among citizens of major Polish cities and support representatives of local governments. We collaborate with The Union of Polish Metropolises and we support major Polish cities throughout their road to zero emission. Our corporate clients, for whom we have calculated their carbon footprint and prepared emission reduction strategies, include companies from the telecommunications sector, production, food, construction and pharmaceutical industry as well as investment funds and banks.

We must truly reduce the emission of greenhouse gasses immediately to protect our planet from the consequences of global warming.

The only way to stop climate changes is to **REDUCE OUR EMISSIONS!**



# 1/3 results

of carbon footprint of **Buglo Play Sp. z o.o** for the year 2023

**Emissions**  
[tCO<sub>2</sub>e/year]

**852.75**

**Emissions per m<sup>2</sup>**  
[tCO<sub>2</sub>e/year and m<sup>2</sup>]

**0.05**

**Emissions per employee**  
[tCO<sub>2</sub>e/year and employee]

**2.40**

**Emissions per annual turnover**  
[tCO<sub>2</sub>e/year and kPLN]

**0.01**

## Scope 1

518.55 t CO<sub>2</sub>e/year, 60.81%

### Mileage (21 vehicles)

489.00 t CO<sub>2</sub> e/year

57.34%

### LPG

29.22 t CO<sub>2</sub> e/year

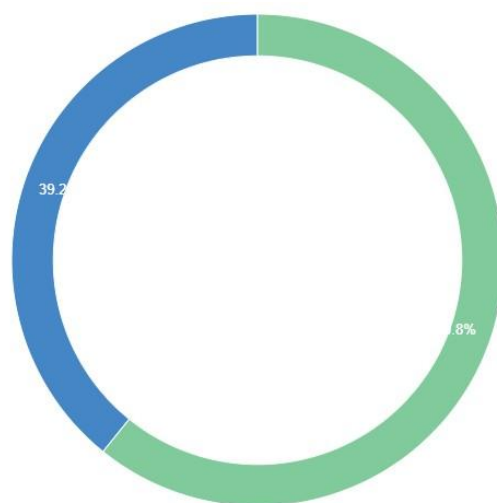
3.43%

### Natural gas

0.34 t CO<sub>2</sub> e/year

0.04%

## Emission structure within Scope 1 and 2 (market-based)



● Scope 1 (518.55 t CO<sub>2</sub> e/year, 60.81%)

● Scope 2 (334.20 t CO<sub>2</sub> e/year, 39.19%)

## Scope 2

334.20 t CO<sub>2</sub>e/year, 39.19%

### Non-RES electricity

334.20 t CO<sub>2</sub> e/year

39.19%

## Legend:

**Emissions** – total company's annual emissions within Scope 1 and 2.

**Emissions per m<sup>2</sup>** – annual emissions per 1m<sup>2</sup> of the total company's premises.

**Emissions per employee** – annual emissions per one employee of your company.

**Emissions per annual turnover** – annual emissions per kPLN 1 of your company's turnover.

Do you want somebody to analyse and interpret the results for you? E-mail us!

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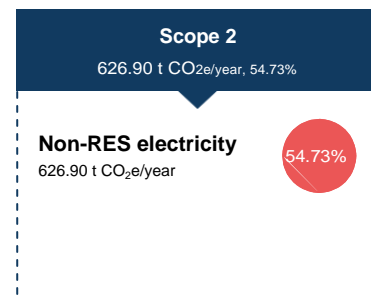
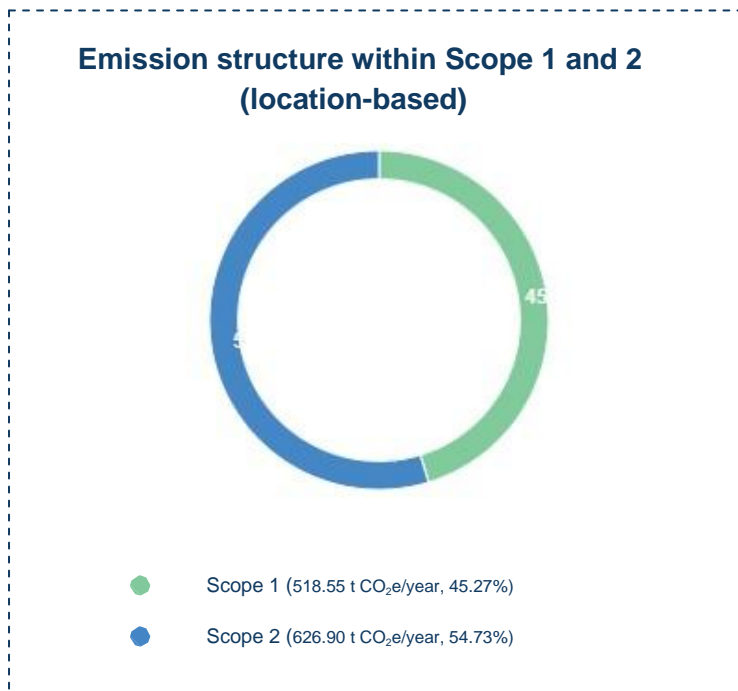
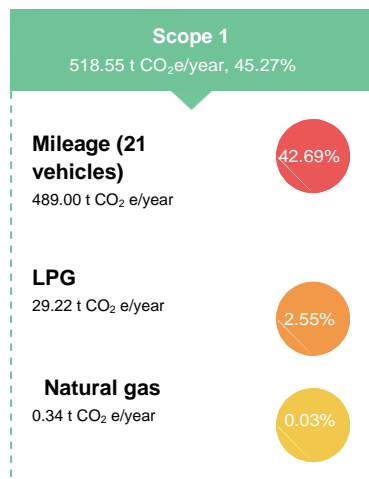


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# 1/3 results (calculated using the location-based method)

of carbon footprint of Buglo Play Sp. z o.o for the year 2023

Emissions [tCO <sub>2</sub> e/year]	Emissions per m <sup>2</sup> [tCO <sub>2</sub> e/year and m <sup>2</sup> ]	Emissions per employee [tCO <sub>2</sub> e/year and employee]	Emissions per annual turnover [tCO <sub>2</sub> e/year and kPLN]
1,145.45	0.07	3.23	0.01



## Legend:

**Emissions**– total company's annual emissions within Scope 1 and 2.

**Emissions per m<sup>2</sup>** – annual emissions per 1m<sup>2</sup> of the total company's premises.

**Emissions per employee** – annual emissions per one employee of your company.

**Emissions per annual turnover** – annual emissions per kPLN 1 of your company's turnover.

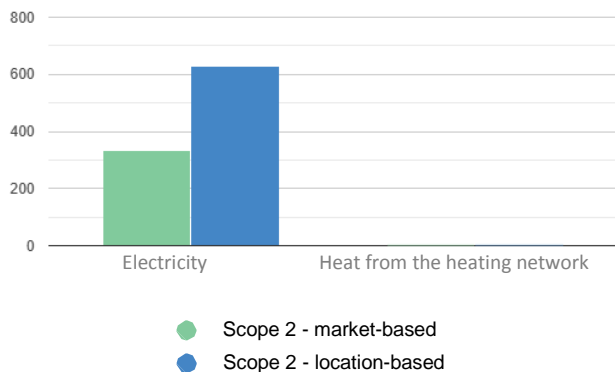
Do you want somebody to analyse and interpret the results for you? E-mail us!



# 2/3 results

of carbon footprint of Buglo Play Sp. z o.o for the year 2023

Comparison of Scope 2 market-based vs. location-based



## The difference between the location-based and market-based methodologies

The GHG Protocol methodology enables calculating Scope 2 emissions using two methods:

**Location-based** (reflects the average intensity of emission of energy from the grid. Emissions are calculated based on the averaged index for Poland.)

**Market-based** (emissions resulting from the consumption of energy purchased from the vendor chosen by the organisation and calculated based on the individual emission index for the given vendor's fuel structure.)

source: <https://ghgprotocol.org/>

\* Emission indexes for electricity and heat account only for carbon dioxide emissions, as no information on the emission of other greenhouse gases can be found in publicly available sources.

\* Without additional information from the suppliers, it was assumed that emission indexes for electricity and heat in Scope 2 factor in transmission losses, which should be factored in in Category 3 of Scope 3. National level emission indexes for electricity and heat in Scope 2 factor in transmission losses, which should be factored in in Category 3 of Scope 3.



**Your company's carbon footprint is equivalent to\***

Travelling around Earth in a car  
**137 times**

Travelling by train from Gdynia to Kraków  
**60,606 times**

The number of people who could be provided with electricity for 1 year  
**1,898 individuals**

The number of people who would have to give up driving their cars and use bicycles instead to compensate for the emissions  
**778 individuals**

## Exemplary annual emissions of greenhouse gasses

Annual emissions of greenhouse gases for the German car maker (Scope 1, Scope 2):  
**7,080,000 t CO<sub>2</sub>e**

Annual emissions of greenhouse gases for the Polish clothing brand (Scope 1, Scope 2):  
**283,322 t CO<sub>2</sub>e**

### \* Figures used in the simulation:

The length of the equator: 40,075.02 km

Direct and indirect emissions from an average (diesel engine) car per each km:  
0.20818 kg CO<sub>2</sub>e/km

Emissions generated by travelling around Earth in an average-size car:  
8,342.98 kg CO<sub>2</sub>e

Emissions from travelling, by train, from Gdynia Główna train station to Kraków Główny train station: 18.90 kg CO<sub>2</sub>

Average consumption of energy per person, Main Statistical Office, for the year 2018:  
864.4kWh/year

Electricity emission index in Poland according to KOBIZE (National Centre for Emissions Management): 0.698kg CO<sub>2</sub>/kWh

Emissions per electricity consumption per one person: 603.4kg CO<sub>2</sub>/year

Direct and indirect emissions from an average (petrol engine) car per each km:  
0.23736kg CO<sub>2</sub>e/km

Average distance covered daily on a bicycle by one person: 17km/person per day

The source for the calculation of greenhouse gases emissions of the German car maker and the Polish clothing brand: Reports from selected companies for 2021, 2022 and 2023, the emission results were calculated with the market-based method.

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# 3/3 results

of carbon footprint of Buglo Play Sp. z o.o for the year 2023

## How to reduce your company's emissions?

### Exemplary carbon footprint reduction levers within Scope 1 and 2

Carbon footprint reduction levers are measures which contribute to a significant reduction in the emission of greenhouse gasses from the sources with a substantial share in company's total carbon footprint in Scope 1 and 2.

#### On-site renewable energy production

Installation of photovoltaic systems or wind turbines on the company's premises is a great way of generating energy directly from renewable sources. This way, you can significantly reduce your dependence on external electricity suppliers and reduce your operating expenses.

#### Optimisation of HVAC systems

Investments in modern and energy-efficient HVAC systems (heating, ventilation and air conditioning) will translate into long-term electricity savings. Other options, which are worth considering, include installing smart thermostats and automatic energy management systems to optimise energy consumption depending on the prevailing conditions.

#### Energy-efficient lighting

Replacing standard light bulbs with LED lights in all company buildings is one of the simplest steps towards energy efficiency. Combining these with smart control systems which will adjust illumination depending on the presence of people and the intensity of sunlight will help push energy costs down even more.

#### Energy consumption reduction programmes

We recommend participating in energy demand management programmes which will reduce energy consumption during peak hours. Not only will this help stabilise the grid but it will also reduce emissions related to starting up high-emission peaker plants.

#### Real-time energy consumption monitoring

With smart meters and real-time energy consumption monitoring systems, you can easily identify the areas where energy is wasted. Responding quickly to such signals may result in significant savings, particularly in the case of large production plants.

### Reduction levers in practice (exemplary data)

Emissions of greenhouse gases from the consumption of purchased electricity for the company's own needs represent 80% of the company's total carbon footprint within Scope 1 and 2. A reduction lever is defined as transition from purchasing electricity made from fossil fuels to energy coming entirely from renewable sources (RES). Emissions from consumption of energy coming from RES equal 0 within Scope 2, which will reduce the company's carbon footprint within Scope 1 and 2 by 80%.

Each calculation of carbon footprint is a unique process. Each company and each organisation is characterised by its unique structure, processes or nature of operations and carbon footprint calculations are based on this uniqueness. It is of paramount importance to make sure reduction strategies match the nature of the industry - we will gladly provide our assistance in this respect.

**Make an appointment with our expert and learn our recommendations**

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# What's next?

## How to use your company's estimated carbon footprint?

### 1. Verify correctness of data in the form

GHG Protocol compliance is fundamental for external reporting of information on the calculated carbon footprint. A one-on-one appointment with our expert will help you make sure that the data fed into the calculator is correct.

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### 2. Design an emission reduction strategy

A well prepared strategy requires mapping areas of operation or potential ways of achieving climate neutrality.

We will help you plan and implement these measures in such a way, as to make sure they are maximally beneficial for your company.

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### 3. Reduce greenhouse gas emissions

Once the company's carbon footprint has been calculated, consider drawing up and implementing an emission reduction plan as well as a strategy for avoiding emissions on your own and within your value chain. Start reducing your emissions from the simplest steps.

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### 4. Develop an internal and external communication strategy

When working with corporate clients, we focus on responsible climate communication, presenting company's actions in a broader context and addressing its top emission areas. We offer workshops dedicated to greenwashing in climate declarations.

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### 5. Let them see you. Beware of greenwashing!

Reporting to CDP (Carbon Disclosure Project) helps **measure your progress** and **positions companies** against the given industry around the globe.

Up to this moment, over 10 thousand climatically engaged companies, cities and regions have published their results there.

Signing up with CDP may give you **competitive edge**. Disclosing you results also helps front running regulatory and political changes. This gives you an opportunity to find new avenues for taking actions required by investors and customers all over the world. Our Foundation will help you systematise and report data to CDP. [Learn more](#)



# Let's reduce emissions together



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We are looking forward to working with you!

## **Climate&Strategy Foundation**

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Climate&Strategy Foundation persistently works towards educating companies and developing informed climate strategies based on reliable data on emission characteristics of their operations. For us, carbon footprint calculation is the first step towards creating an emission reduction strategy and not merely a reporting responsibility. Apart from calculating carbon footprint, we also act as educators and propagators. We educate managers (from Management Board level up) from the ICT, financial, food, property development and production industries.

We regularly hold workshops and webinars addressed to managers of Polish companies, business leaders, ESG experts or journalists, we emphasise the importance of the quality of carbon footprint calculations, educate and encourage including climate into business priorities of companies.

We offer consultancy services, implement grants available through collaboration with the European Climate Foundation but we also develop a programme for collaboration with corporate partners. This is exactly the form of collaboration we would like to invite your company to.

We must truly reduce the emission of greenhouse gasses immediately to protect our planet from the consequences of global warming.

The only way to stop climate changes is to

**REDUCE EMISSIONS!**



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# Company's overview



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Reporting period	2023
Industry	Production of rubber and plastic goods
Workforce	355
Annual turnover (in kPLN)	127,238
Floor space in m <sup>2</sup>	15,955
Fleet	21



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# Methodology

The Calculator estimates emissions coming directly from the organisation's operations and enables measuring, simulating and monitoring carbon footprint across the entire supply chain.

We want company carbon footprint calculation and implementation of emission reduction strategies to be not only a condition for maintaining one's position within supply chains of global companies but also to be perceived as an opportunity for improving energy efficiency and competitiveness.

GHG emission coefficients used in this study are relevant in terms of the following:

- **time** – the indexes are adequate/closest to the period of time, for which the carbon footprint is being calculated;
- **geography** – the indexes are representative of the area, for which the carbon footprint is being calculated;
- **technology** – the indexes account for the used technology, for which the carbon footprint is being calculated.

We rely on coefficients from recognized, reviewed and officially published sources: both domestic and international research centres, professional associations as well as regulatory bodies and institutions responsible for monitoring and statistics in relevant areas.

Our approach conforms to GHG Protocol and IPCC methodologies as well as the methodologies indicated in the referred standards. [1]

***This calculation is a carbon footprint estimate. It does not represent the only methodology for calculations made by Climate&Strategy Foundation and does not factor in, exhaustively, all circumstances which may affect carbon footprint calculations.***

[1] 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Chapter 2: Approaches to Data Collection; GHG Protocol: A Corporate Accounting and Reporting Standard; PAS 2050:2011

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