

# GREENHOUSE GAS EMISSION REPORT

Patelec Elpena sp. z o.o. for the Year 2024

# SUSTAINABILITY EXTENDS BEYOND COMPLIANCE

At **PATELEC**, **Sustainability** is not just a goal; it is a **fundamental business driver** that influences every aspect of our operations.

We are **committed** to continuously measuring and *improving our environmental and social impact*. By regularly assessing our performance, we gain valuable insights that empower us to innovate, create new business opportunities, and optimize our processes, in a way that is both economically and **environmentally responsible**.



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# Table of Contents

1. ABOUT US	P.4
2. GENERAL COMPANY INFORMATION	p.5
3. WHAT IS A CARBON FOOTPRINT	p.6
4. SUSTAINABLE DEVELOPMENT – INTRODUCTION	s.7
5. ORGANIZATIONAL AND REPORTING BOUNDARIES	s.8
6. CO <sub>2</sub> E EMISSIONS UNCERTAINTY ANALYSIS REPORT	s.12
7. METHODOLOGY AND ASSUMPTIONS	s.14
8. EMISSION FACTORS AND DATA SOURCES	s.15
9. GWP INDICATORS (GLOBAL WARMING POTENTIAL)	s.22
10. GHG EMISSIONS – CARBON FOOTPRINT (MARKET-BASED)	s.24
11. GHG EMISSIONS – CARBON FOOTPRINT (LOCATION-BASED)	s.24
12. TOTAL EMISSIONS – SCOPE 1 AND 2	s.25
13. CERTIFICATION AND PLANNED REPORT VERIFICATION	s.30
14. REVISION HISTORY	s.31



# About us

- **Patelec Elpena sp. z o.o.**, headquartered in Legnica, is part of the PATELEC Group – an international manufacturer of power cables and wiring solutions, operating continuously since the 1950s.
- For decades, we have been delivering high-quality power supply solutions for industrial, professional, and consumer sectors, while actively engaging in sustainable development and climate responsibility.
- Our products – from low-voltage cables and industrial wiring to custom-designed solutions – are manufactured through an integrated production process that ensures full control over quality and efficiency. This allows us to minimize material waste, optimize raw material consumption, and reduce our carbon footprint at every stage of the value chain.

# General Company Information

## Company Name

**PATELEC ELPENA Sp. z o.o.**  
ul. Św. Wojciecha 24  
59-220 Legnica, Poland

## Additional Information

NIP/VAT: PL691-020-40-79  
REGON: 390058690  
District Court of Wrocław-Fabryczna  
IX Business Department  
Registration KRS 50465  
Initial capital 36.581.900 PLN

## Industry

Manufacture of Electrical Equipment

## Average Number of Employees\*

382

## Reporting Period

2024

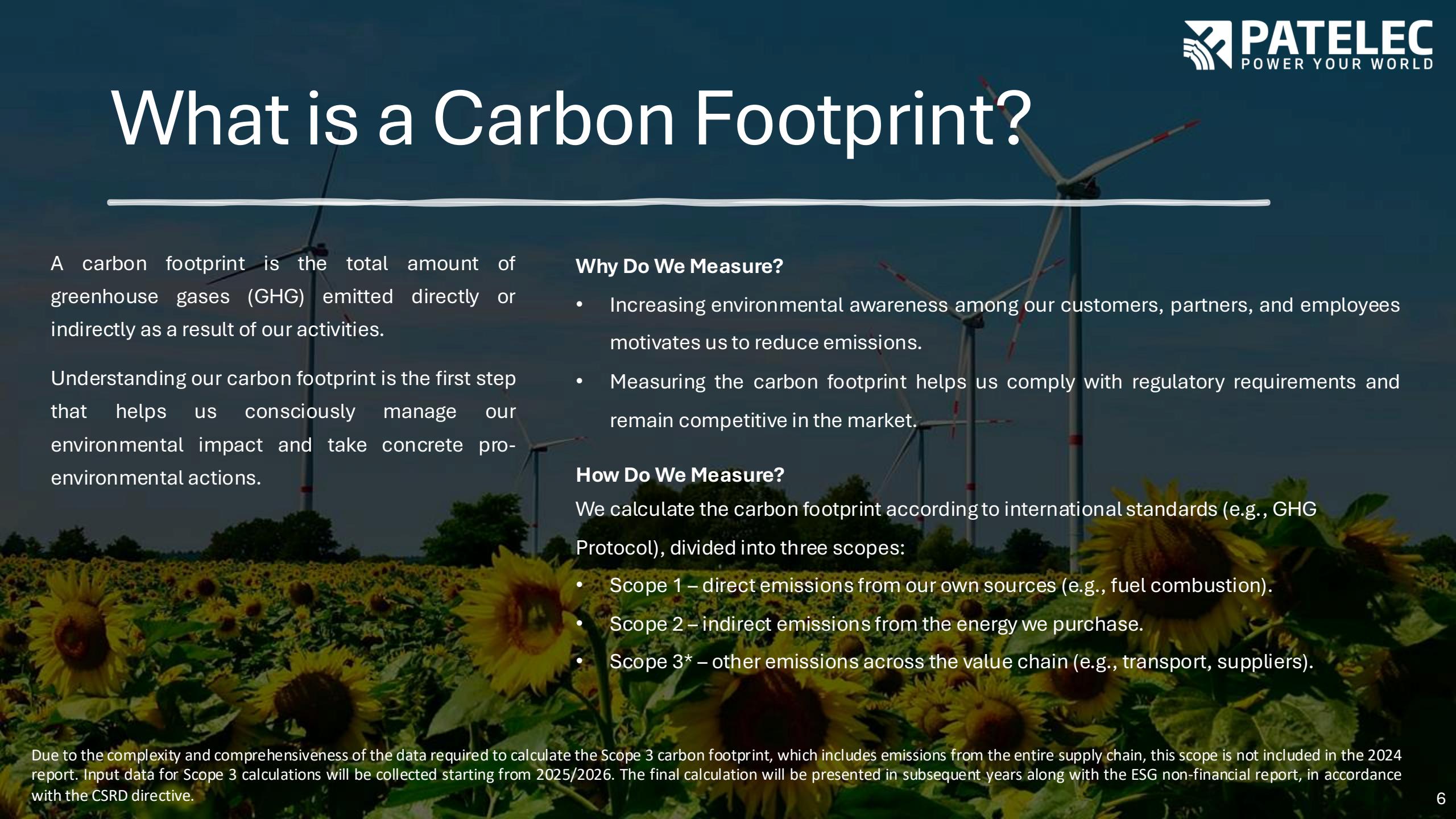
## Annual Turnover (PLN)

245 251 751,23 PLN

\*Average number of employees based on quarterly data (Q1–Q4) for the year 2024

# What is a Carbon Footprint?

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A carbon footprint is the total amount of greenhouse gases (GHG) emitted directly or indirectly as a result of our activities.

Understanding our carbon footprint is the first step that helps us consciously manage our environmental impact and take concrete pro-environmental actions.

## Why Do We Measure?

- Increasing environmental awareness among our customers, partners, and employees motivates us to reduce emissions.
- Measuring the carbon footprint helps us comply with regulatory requirements and remain competitive in the market.

## How Do We Measure?

We calculate the carbon footprint according to international standards (e.g., GHG Protocol), divided into three scopes:

- Scope 1 – direct emissions from our own sources (e.g., fuel combustion).
- Scope 2 – indirect emissions from the energy we purchase.
- Scope 3\* – other emissions across the value chain (e.g., transport, suppliers).

Due to the complexity and comprehensiveness of the data required to calculate the Scope 3 carbon footprint, which includes emissions from the entire supply chain, this scope is not included in the 2024 report. Input data for Scope 3 calculations will be collected starting from 2025/2026. The final calculation will be presented in subsequent years along with the ESG non-financial report, in accordance with the CSRD directive.

# Sustainable Development

## — Introduction

The reported greenhouse gas emissions of Patelec Elpena sp. z o.o. have been calculated in accordance with The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (revised version) and the GHG Protocol Scope 2 Guidance for Scopes 1 and 2 — covering emissions directly influenced by the company.

**The carbon footprint calculation report for Patelec Elpena's operations has been prepared to:**

- Manage greenhouse gas emissions and identify opportunities for their reduction,
- Provide transparent communication to stakeholders and interested parties (with particular attention to Senior Management, Customers, Shareholders, Suppliers, Financial Institutions, Employees, the Local Community, and external organizations collaborating with Patelec Elpena) regarding greenhouse gas emissions.



# Organizational Boundaries

The operational boundaries of our organization have been defined based on **operational and financial control**, encompassing all production buildings, warehouses, and offices over which we have full process and environmental control (accounting for 100% of emissions for the specified unit)\*.

Within the identification of emission sources, the following scopes are distinguished\*\*:

- Scope 1: emissions from combustion in stationary machinery, company vehicles, and leaks from refrigeration systems.
- Scope 2: emissions resulting from purchased electricity and heat.

\*Greenhouse gas emissions for Scopes 1 and 2 from the company's operations have been monitored since 2019; however, the year 2024 will serve as the baseline year against which future calculations will be compared and reduction targets for the coming years will be set.

\*\*The conducted analysis for the identification of emission sources did not reveal any potential exclusions.



# Scope of Reported Emissions

- Scope 2 emissions were calculated using both the location-based and market-based methods.
- For Scope 1, the main sources of emissions were:
  - Fuel consumption in company vehicles, such as gasoline and diesel,
  - LPG combustion by forklifts,
  - Stationary combustion using heaters.
- Regarding Scope 2, the sources of greenhouse gas emissions were primarily:
  - Electricity consumption used to power machines in individual production departments,
  - Heat energy consumption for heating production halls, parts of warehouse areas, and administrative buildings.



# Reporting Boundaries

Due to the growing importance of climate responsibility, our organization has undertaken actions to estimate and reduce greenhouse gas emissions.

This report focuses on identifying the key sources of CO<sub>2</sub> emissions resulting from our operational activities, energy consumption, and supply chain connections.

## Sources of Emissions:

Production Department PG	NUMBER OF MACHINES	Consumed Utilities				
		Electric Energy	Water	Compressed Air	Oils and Lubricants	Fuels
Copper single wire	3	X	X	X	X	
Thick-wire drawing	2	X	X	X	X	
Copper twister strands	9	X		X	X	

Production Department PW	NUMBER OF MACHINES	Consumed Utilities				
		Electric Energy	Water	Compressed Air	Oils and Lubricants	Fuels
EXTRUDERS	4	X	X	X	X	
STRANDING UNITS	2	X	X	X	X	
REWINDING LANE	1	X			X	

# Reporting Boundaries

## Sources of Emissions:

Production Department PZ	NUMBER OF MACHINES	Consumed Utilities			
		Electric Energy	Water	Compressed Air	Oils and Lubricants
Cutting Machine	8	X		X	X
Cutting and Coiling	4	X		X	X
Automation Unit	11	X	X	X	X
Crimping Machines	35	X		X	
Injection Molding Machines	27	X	X	X	X
Connector Crimping Machines	29	X		X	
Assembly Machines	13	X		X	
Testers	14	X		X	
Coiling Machines	9	X		X	X
Manual Machines	17	X		X	

# CO<sub>2</sub>e Emissions Uncertainty Analysis Report

## Purpose of the Analysis

The purpose of this analysis is to assess the level of total CO<sub>2</sub>e emissions uncertainty resulting from the company's operational activities and to identify the main sources of error that may affect the quality of input data.

Emission Source	Type of Emission	GHG Scope	Data Type
Electricity	Indirect	Scope 2	Invoice Data
Heating	Indirect	Scope 2	Invoice Data
LPG	Direct	Scope 1	Invoice Data
Diesel	Direct	Scope 1	Fueling Records, Invoice Data
Gasoline	Direct	Scope 1	Fueling Records, Invoice Data
Stationary Combustion	Direct	Scope 1	Invoice Data

# CO<sub>2</sub>e Emissions Uncertainty Analysis Report

The greatest impact and main sources of uncertainty affecting total emissions uncertainty are:

- **Electricity consumption** – the largest share of emissions and a moderate level of uncertainty
- **Thermal energy and LPG** – significant shares and moderate uncertainty levels
- The total CO<sub>2</sub>e emissions amounted to **4,242.929 t CO<sub>2</sub>e** (Market-Based), with an estimated uncertainty of **± 5%**, which equals approximately **± 212.146 t CO<sub>2</sub>e**.

Activity Data Uncertainty (%) - 2.5% uncertainty value was assumed for the activity data itself, along with an additional 2.5% uncertainty resulting from human factor-related activities.

Emission Factor Uncertainty (%) - The uncertainty of emission factors was assumed based on the average allowable values provided by KOBiZE for the respective emission sources.

Source	Emission Value (t CO <sub>2</sub> e) (Market-Based)	Activity Data Uncertainty (%)*	Total Uncertainty (%)	Emissions ± Uncertainty (t CO <sub>2</sub> e)
Electricity	3174,997	5	5	± 158,749
Heating	991,195	5	5	± 49,559
LPG	62,012	5	5	± 3,100
Diesel	6,626	5	5	± 0,331
Gasoline	4,914	5	5	± 0,245
Stationary Combustion	3,185	5	5	± 0,159
<b>TOTAL</b>	<b>4242,929</b>	-	<b>5%</b>	<b>± 212,146</b>

**Detailed Table with Uncertainty Estimates**

Component	Source of Error
Amount of Energy Consumed	Invoice Data
Emission Factor	GHG Protocol, KOBiZE, IPCC
Units and Conversions	Calculation and Conversion Errors

# Methodology and Assumptions

Estimating GHG emissions is a key part of our responsible environmental management. We have prepared the **carbon footprint report** to identify the main sources of emissions, determine their scale, and set directions for reduction actions aligned with sustainable development goals and the organization's climate policy.

We use calculations compliant with the **ISO 14064-1 standard** and the **GHG Protocol**, which are currently the most widely applied tools for calculating and monitoring greenhouse gas emissions. We operate in line with new requirements, aiming to reduce our negative impact on the climate through emission reductions.

Emission values are presented in tones (tCO2e) of the standard carbon dioxide equivalent (CO2e) unit and refer to carbon dioxide emissions\*. During the analysis of input data, no emissions of other greenhouse gases were identified.

For the Scope 1 carbon footprint calculation, KOBiZE emission factors were used, which consider only CO<sub>2</sub> as the sole greenhouse gas. During the Market-based calculation for electricity and heat, indicators provided by energy suppliers were used, also accounting solely for CO<sub>2</sub>.





# Emission Factors and Data Sources for Emissions

**Emission factors** are coefficients used to calculate greenhouse gas emissions based on quantitative data regarding fuel, energy, or material consumption. They specify the amount of emissions per unit of a given carrier (e.g., kg CO<sub>2</sub> per liter of fuel, kWh of energy, or ton of material).

**For the calculation of our Carbon Footprint**, we utilized various emission data sources, including both primary data (e.g., electricity consumption, amount of fuel burned, data from invoices, meters, or energy management systems) and secondary data sourced from databases and publications such as:

- IPCC databases (Intergovernmental Panel on Climate Change),
- GHG Protocol publications and tools,
- National or regional databases (e.g., KOBiZE – National Centre for Emission Balancing and Management),
- Data from energy system operators.

The accuracy and currency of the emission factors and data sources used are crucial to ensuring the reliability of our carbon footprint calculations.

# Emission Factors – Scope 1

(Market-based)

**Scope 1: Direct emissions** are primarily estimated based on fuel consumption data for vehicles used within the organization.

**Fuel consumption in mobile combustion** refers to greenhouse gas emissions calculated solely from the amount of fuel used (not electricity or distance traveled), occurring in mobile machinery (moving equipment) owned by the organization.

For the purpose of Scope 1 Carbon Footprint calculation, the following company vehicles and fuel sources were included:

- Forklifts – LPG
- Toyota ProAce – diesel
- Toyota Auris – petrol
- Industrial heaters – propane



# Emission Factors – Scope 1

(Market-based)

Emissions were calculated using tools provided by the GHG Protocol (<https://ghgprotocol.org/calculation-tools>), incorporating emission factors adapted to the Polish market. Emission values are presented in tonnes (Mg) of the standard carbon dioxide equivalent unit (CO<sub>2</sub>e).

Emission Source	Emission Factor Values After Calculation (tCO <sub>2</sub> e):
LPG	2,9846
Gasoline	2,3178
Diesel	2,6765
Stationary Combustion	2,9846

The fuel emission calculation was based on **KOBiZE indicators**, and therefore includes only CO<sub>2</sub> emissions. The calculation took into account the calorific value (WO) and emission factor (WE) for liquid gases. Additionally, in the calculation of emissions from gasoline and diesel combustion\*, the density factors for gasoline and diesel were also included (values were sourced from the Regulation of the Minister of Climate).

*Due to the lack of confirmation regarding the bio-additive content in the fuels used by company vehicles of Patelec Elpna sp. z o.o., these data were not included in the fuel-related emissions calculations.*

## Emission Source:

KOBiZE: [Calorific values \(WO\) and CO<sub>2</sub> emission factors \(WE\) for 2021, used for reporting under the Emission Trading System for the year 2024](#).

Regulation of the Minister of Climate: [On lists containing information and data on the scope of environmental use and the amount of due fees, dated December 19, 2019, p. 18.](#)

Tabela 16. Wartości opałowe i wskaźniki emisji dla pozostałych paliw

RODZAJ PALIWA	WO	WO	WE CO <sub>2</sub>
	MJ/kg	MJ/m <sup>3</sup>	kg/GJ
Brykiety węgla kamiennego	20,7		97,50
Brykiety węgla brunatnego	20,7		97,50
Ropa naftowa	42,3		73,30
Drewno opałowe i odpady pochodzenia drzewnego	15,6		112,00
Biogaz	50,4		54,60
Odpady przemysłowe			143,00
Odpady komunalne – niebiogeniczne	10,0		91,70
Odpady komunalne – biogeniczne	11,6		100,00
Inne produkty naftowe	40,2		73,30
Koks naftowy	32,5		97,50
Koks i półkoks (w tym gazowy)	28,2		107,00
Gaz ciekły	47,3		63,10
Benzyny silnikowe	44,3		69,30
Benzyny lotnicze	44,3		70,00
Paliwa odrzutowe	44,3		71,50
Olej napędowy (w tym olej opałowy lekki)	43,0		74,10
Półprodukty z przerobu ropy naftowej	44,8		73,30
Gaz rafineryjny	49,5		57,60
Gaz koksowniczy	38,7	16,87	44,40
Gaz wielkopiecowy	2,47	3,37	260,00

Wartości WO w tabeli 16, wyrażone w MJ/kg, to wartości domyślne – pochodzą z 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Olej opałowy lekki jest w międzynarodowych statystykach paliwowo-energetycznych i w inwentaryzacji emisji gazów cieplarnianych wliczany do oleju napędowego.

Wartości opałowe, wyrażone w MJ/m<sup>3</sup>, obliczone zostały w oparciu o krajowe dane statystyczne. Wartości te podane zostały w celu ułatwienia przeliczenia zużycia paliw gazowych z jednostek objętościowych na jednostki energetyczne i nie są one zamieszczone w inwentaryzacji emisji gazów cieplarnianych za rok 2021.



# Emission Factors – Scope 2

(Market-based)

## Electric Energy

The main source of electric energy for Patelec Elpena sp. z o.o. is supplied by **Tauron Polska Energia SA**. The purchased electricity is primarily used to power production machinery and offices, as well as devices generating compressed air, heaters, and other equipment. Market-based Scope 2 emissions were determined based on data provided by energy suppliers.

## Heating

Most of our buildings require heat to control air temperature and to heat water. Many industrial processes also need heat for specific equipment.

- The main supplier of thermal energy for Patelec Elpena is the **Provincial Heat Energy Company** (Wojewódzkie Przedsiębiorstwo Energetyki Cieplnej S.A., WPEC) in Legnica. The company provides 100% of the thermal energy for all buildings owned by Patelec Elpena.

# Emission Factors – Scope 2

(Market-based)

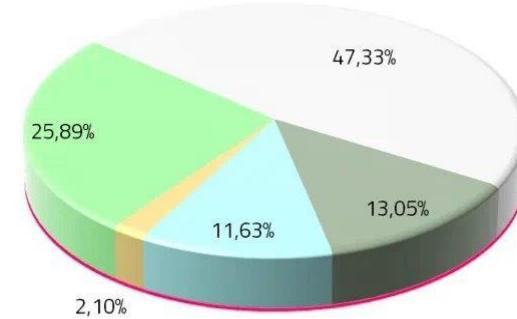
## Electric Energy

For the purpose of the Scope 2 carbon footprint calculation for the year 2024, the emission factor provided by TAURON Polska Energia S.A. for 2024 was used, amounting to **0.51116 Mg/kWh**.

**Emission Source:**

TAURON – Fuel Mix Structure 2024: <https://www.tauron.pl/tauron/o-tauronie/struktura-paliw>

Wykres kołowy struktury paliw i innych nośników energii pierwotnej  
zużytej do wytworzenia energii elektrycznej sprzedanej  
przez Tauron Polska Energia S.A. w 2024 r.



- Odnawialne źródła energii
- Węgiel kamienny
- Węgiel brunatny
- Gaz ziemny
- Inne

2. Informacje o wpływie wytworzenia energii elektrycznej na środowisko w zakresie wielkości emisji dla poszczególnych paliw i innych nośników energii pierwotnej zużywanych do wytworzenia energii elektrycznej sprzedanej przez TAURON Polska Energia S.A. w 2024 r.

Miejsce, w którym dostępne są informacje o wpływie wytworzenia energii elektrycznej na środowisko	Rodzaj paliwa	CO2 [Mg/MWh]	SO2 [Mg/MWh]	NOx [Mg/MWh]	Płyty [Mg/MWh]	Odpady radioaktywne [Mg/MWh]
<a href="https://www.tauron.pl/tauron/o-tauronie/struktura-paliw">www.tauron.pl/tauron/o-tauronie/struktura-paliw</a>	Łącznie: węgiel kamienny, węgiel brunatny, gaz ziemny, odnawialne źródła energii i inne	0,51116	0,00030	0,00036	0,00001	0,00000

Powyższe dane są realizacją obowiązku sprawozdawczego, o którym mowa w § 44 Rozporządzenia Ministra Klimatu i Środowiska z dnia 22 marca 2023 r. w sprawie szczegółowych warunków funkcjonowania systemu elektroenergetycznego (Dz. U. z 2023 r. poz. 819 z dnia 28 kwietnia 2023 r. z późniejszymi zmianami), a ich zakres określa załącznik nr 2 do ww. rozporządzenia.

Podane dane opracowano na podstawie informacji przekazanych przez kontrahentów i są wartościami uśrednionymi.

# Emission Factors – Scope 2

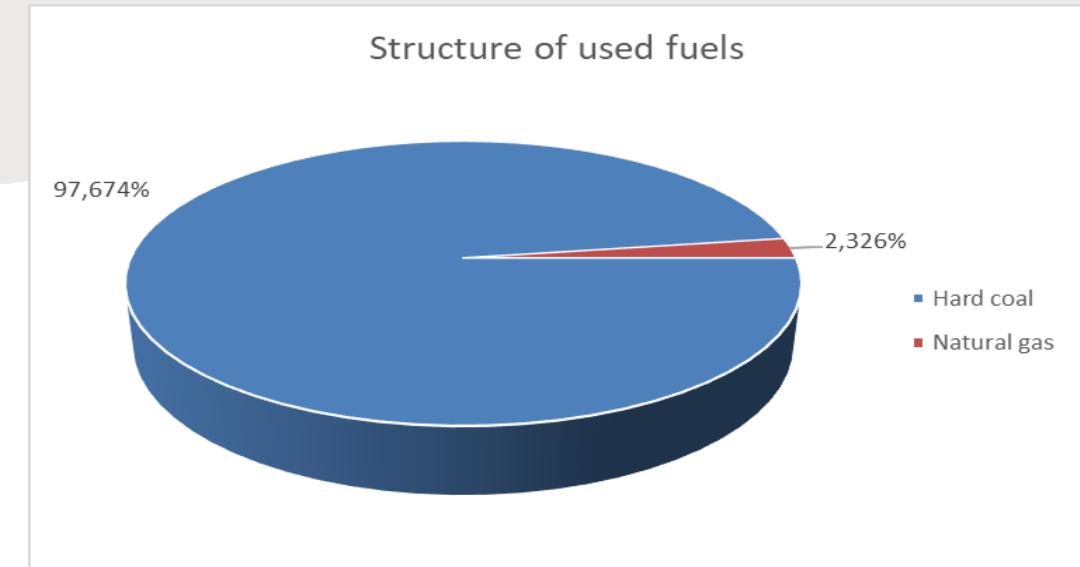
(Market-based)

## Heating

For the purpose of calculating the Scope 2 carbon footprint for the year 2024, the emission factor provided by WPEC for 2024 was used. Based on the percentage structure of the fuels consumed, the CO<sub>2</sub> emission factor was estimated at **132.357 kg/GJ**.

### Emission Source:

WPEC - Fuel Mix Structure 2024: <https://www.wpec.legnica.pl/Aktualnosci/Biezace-informacje/Struktura-paliw~n59>



WPEC Legnica A.A.						
L.p.	Fuel	CO <sub>2</sub>	SO <sub>2</sub>	NO <sub>x</sub>	Pty	Radioactive waste
(kg/GJ)						
1	Hard coal	134,138	0,504	0,258	0,092	0
2	Natural gas	57,577	0,0001	0,036	0,0004	0
TOTAL		132,357*	0,5041	0,294	0,0924	0

# Emission Factors – Scope 2

(Location-based)

In the case of Scope 2 location-based emissions, the calculations were performed using emission intensity factors for electricity generation in Poland based on **KOBiZE** indicators for the year 2024, and for thermal energy, based on the 2023 emission factor published by the **Energy Regulatory Office (URE)**.

- Electricity (location-based): **0.597 tCO<sub>2</sub>e/MWh**
- Heating (location-based): **0.09875 tCO<sub>2</sub>e/GJ**

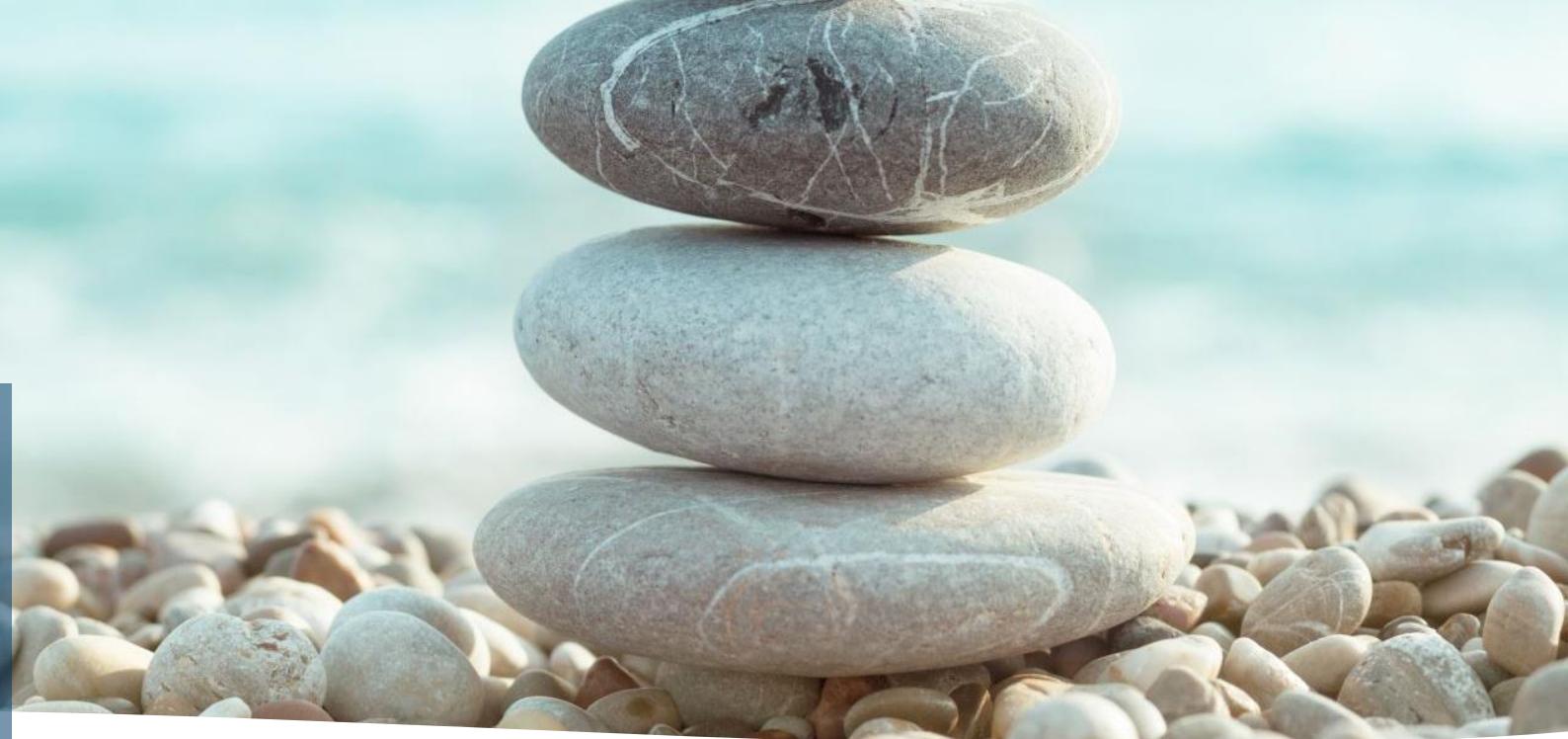
## Emission Source:

KOBiZE: [Wskaźniki emisjyjności CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO i pyłu całkowitego dla energii elektrycznej na podstawie informacji zawartych w Krajowej bazie o emisjach gazów cieplarnianych i innych substancji za 2023 rok](#)

URE: [2023 - Energetyka cieplna w liczbach - Urząd Regulacji Energetyki](#)



The Global Warming Potential (GWP) values applied in this report correspond to a 100-year time horizon ( $\text{GWP}_{100}$ ) and are sourced from Table 7.15 of the report: *Intergovernmental Panel on Climate Change (IPCC), Sixth Assessment Report (AR6), Working Group I – Climate Change 2021: The Physical Science Basis*. The only greenhouse gas analyzed in this report is carbon dioxide ( $\text{CO}_2$ ), whose GWP over a 100-year time horizon is 1.000.



Species	Lifetime (Years)	Radiative Efficiency ( $\text{W m}^{-2} \text{ ppb}^{-1}$ )	GWP-20	GWP-100	GWP-500	GTP-50	GTP-100	CGTP-50 (years)	CGTP-100 (years)
$\text{CO}_2$	Multiple	$1.33 \pm 0.16 \times 10^{-5}$	1.	1.000	1.000	1.000	1.000		
$\text{CH}_4\text{-fossil}$	$11.8 \pm 1.8$	$5.7 \pm 1.4 \times 10^{-4}$	$82.5 \pm 25.8$	$29.8 \pm 11$	$10.0 \pm 3.8$	$13.2 \pm 6.1$	$7.5 \pm 2.9$	$2823 \pm 1060$	$3531 \pm 1385$
$\text{CH}_4\text{-non fossil}$	$11.8 \pm 1.8$	$5.7 \pm 1.4 \times 10^{-4}$	$79.7 \pm 25.8$	$27.0 \pm 11$	$7.2 \pm 3.8$	$10.4 \pm 6.1$	$4.7 \pm 2.9$	$2675 \pm 1057$	$3228 \pm 1364$
$\text{N}_2\text{O}$	$109 \pm 10$	$2.8 \pm 1.1 \times 10^{-3}$	$273 \pm 118$	$273 \pm 130$	$130 \pm 64$	$290 \pm 140$	$233 \pm 110$		
HFC-32	$5.4 \pm 1.1$	$1.1 \pm 0.2 \times 10^{-1}$	$2693 \pm 842$	$771 \pm 292$	$220 \pm 87$	$181 \pm 83$	$142 \pm 51$	$78,175 \pm 29,402$	$92,888 \pm 36,534$
HFC-134a	$14.0 \pm 2.8$	$1.67 \pm 0.32 \times 10^{-1}$	$4144 \pm 1160$	$1526 \pm 577$	$436 \pm 173$	$733 \pm 410$	$306 \pm 119$	$146,670 \pm 53,318$	$181,408 \pm 71,365$
CFC-11	$52.0 \pm 10.4$	$2.91 \pm 0.65 \times 10^{-1}$	$8321 \pm 2419$	$6226 \pm 2297$	$2093 \pm 865$	$6351 \pm 2342$	$3536 \pm 1511$		
PFC-14	50,000	$9.89 \pm 0.19 \times 10^{-2}$	$5301 \pm 1395$	$7380 \pm 2430$	$10,587 \pm 3692$	$7660 \pm 2464$	$9055 \pm 3128$		

Table 7.15 | Emissions metrics for selected species: global warming potential (GWP), global temperature-change potential (GTP).

**Sources:**

IPCC: *Intergovernmental Panel on Climate Change (IPCC), Sixth Assessment Report (AR6), Working Group I – Climate Change 2021: The Physical Science Basis*.  
[2021ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_FullReport\\_small.pdf](https://ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport_small.pdf)



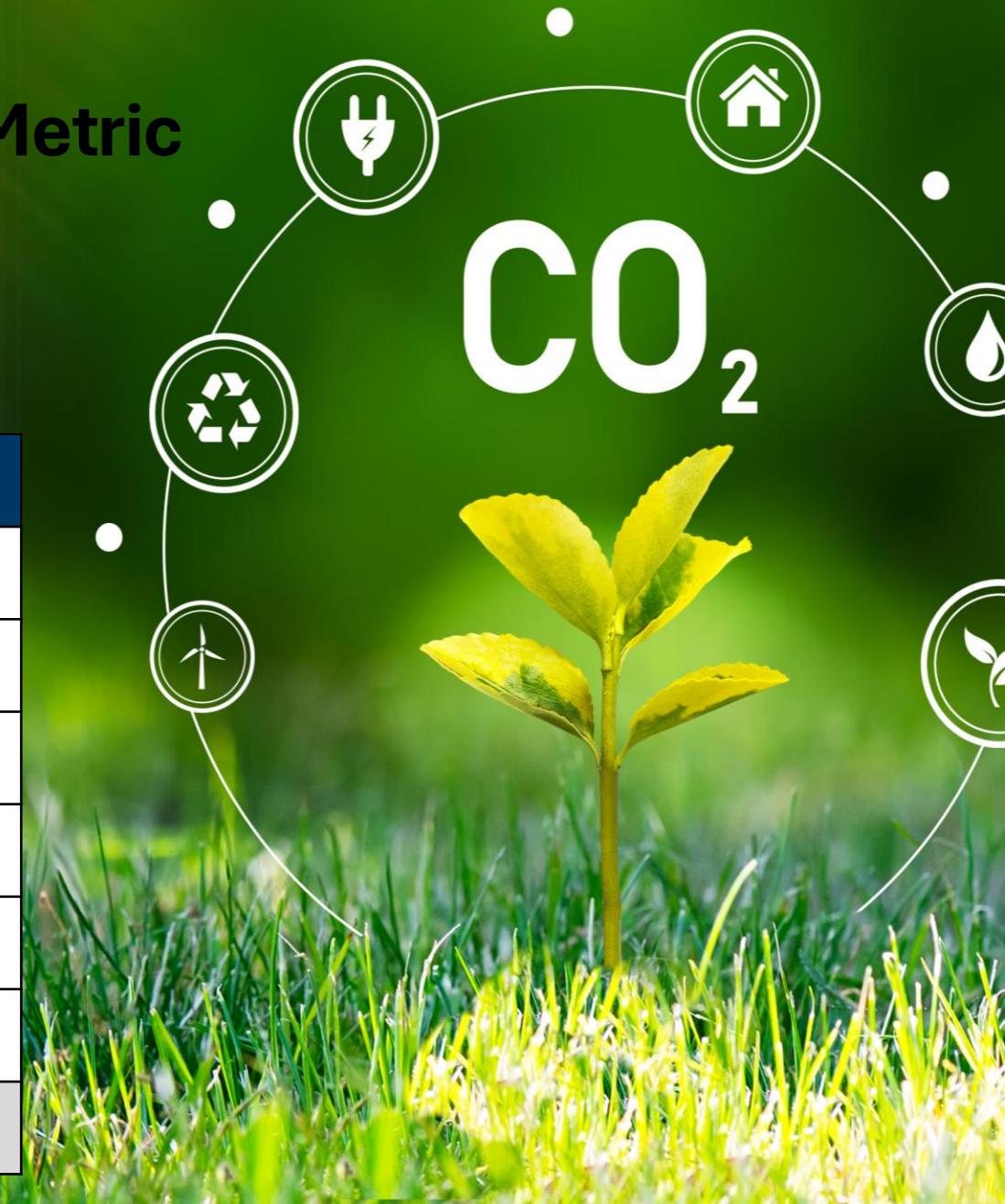
# GHG Emissions

# PATELEC Elpena sp. z o.o.

# Carbon Footprint [t CO<sub>2</sub>eq] – Primary Metric

(Market-based)

Emission source	Value
<b>Scope 1:</b> LPG	62,012 t CO <sub>2</sub> e
<b>Scope 1:</b> Gasoline	6,626 t CO <sub>2</sub> e
<b>Scope 1:</b> Diesel	4,914 t CO <sub>2</sub> e
<b>Scope 1:</b> Stationary Combustion	3,185 t CO <sub>2</sub> e
<b>Scope 2 :</b> Electric Energy	3174,997 t CO <sub>2</sub> e
<b>Scope 2 :</b> Heating	991,195 t CO <sub>2</sub> e
<b>Total emission (Market-based method)</b>	<b>4242,929 t CO<sub>2</sub>e</b>





## Carbon Footprint [t CO<sub>2</sub>eq] – Primary Metric (Location-based)

Emission source	Value
Scope 1: LPG	62,012 t CO <sub>2</sub> e
Scope 1: Gasoline	6,626 t CO <sub>2</sub> e
Scope 1: Diesel	4,914 t CO <sub>2</sub> e
Scope 1: Stationary Combustion	3,185 t CO <sub>2</sub> e
Scope 2 : Electric Energy	3708,180 t CO <sub>2</sub> e
Scope 2 : Heating	735,325 t CO <sub>2</sub> e
<b>Total emission (Location-based method)</b>	<b>4520,242 t CO<sub>2</sub>e</b>

# Total Emissions for Scope 1

Scope 1	Annual Consumption
Refrigerant Emissions*	0 KG
Stationary Combustion	1067 KG
Mobile Combustion – LPG	20777 KG
Mobile Combustion – Petrol (PB)	2858,89 ltr
Mobile Combustion – Diesel (ON)	1835,97 ltr
Scope 1	CTotal emission [%] (Market-based)
Scope 1: Refrigerant Emissions*	0 %
Scope 1: Stationary Combustion**	0,075%
Scope 1: Mobile Combustion	1,734 %
<b>Total emission (Market-based) [%]</b>	<b>1,809 %</b>

\*Scope 1: Refrigerant emissions – based on data from air conditioner and cooling system inspections, no leaks were detected in the systems.

\*\*Stationary combustion refers to the burning of propane in heaters in the PZ production department.

The largest source of Scope 1 emissions for Patelec Elpna are transport fuels (diesel, LPG, and petrol), which account for 95% of Scope 1 emissions.

These primarily include:

- Forklifts powered by LPG used in day-to-day operations,
- The company's fleet of passenger vehicles used for business purposes.

Department	Vehicle Type	Amount	Fuel
Warehouse	Forklift H16	2	LPG
Produciton PG	Forklift H25T	12	LPG
Produciton PW	Forklift H14	6	LPG
Produciton PZ	Forklift H18	8	LPG
Warehouse	Forklift H30	1	LPG
Toyota Auris	Passenger Car	1	Gasoline [PB]
Toyota Proace	Passenger Car	1	Diesel [ON]
<b>TOTAL</b>		<b>31</b>	

# Total Emissions for Scope 2

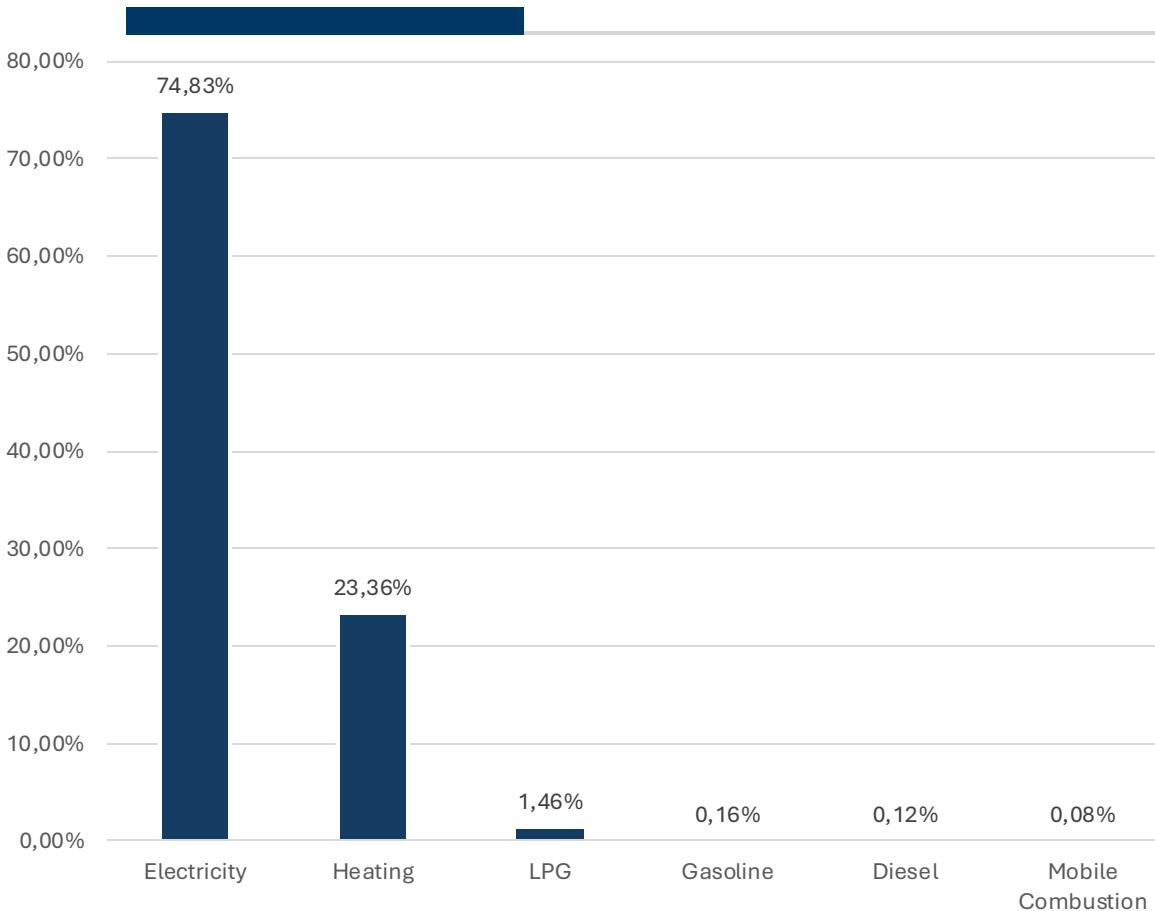
In 2024, Patelec Elpena sp. z o.o. **consumed 6,211.357 MWh of electric energy and 7,488 GJ of thermal energy (heating)**, the majority of which came from the combustion of fossil fuels, based on data provided by the electricity and heat distributors. Currently, the company does not invest in renewable energy sources.

Considering that the 2024 Carbon Footprint Report is the company's first report of this kind, this report and the year 2024 will serve as the baseline and reference point for future years of the organization's Carbon Footprint reporting.

	Annual Consumption	Total Emissions [%]
<b>Scope 2: Electric Energy</b>	6211,357 MWh	74,830 %
<b>Scope 2: Heating</b>	7488,8 GJ	23,361 %
<b>Total Emissions (Market-based) [%]</b>		<b>98,198 %</b>

# Total Emissions for Scope 1 and Scope 2 [%]

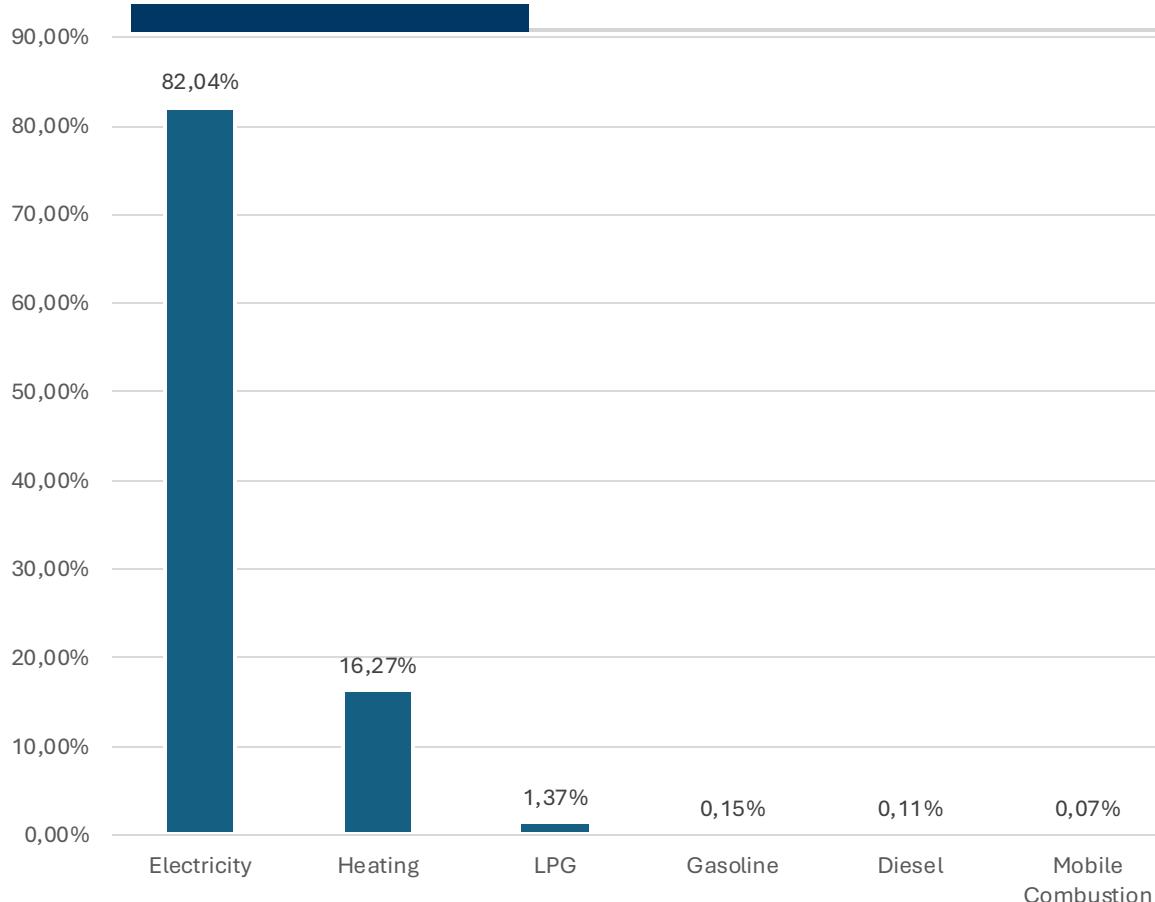
(Market-based)



Emission	Total Emissions [t CO <sub>2</sub> eq] (Market-Based)	Percentage of Total Emissions (Market-Based)
Scope 1: Refrigerant Emissions*	0,000	0 %
Scope 1: Stationary Combustion**	73,552 t CO <sub>2</sub> eq	1,462 %
Scope 1: Mobile Combustion	3,185 t CO <sub>2</sub> eq	0,075 %
Scope 2: Electric Energy	3174,997 t CO <sub>2</sub> eq	74,830 %
Scope 2: Heating	991,195 t CO <sub>2</sub> eq	23,361 %

# Total Emissions for Scope 1 and Scope 2 [%]

(Location-based)



Emission	Total Emissions [t CO <sub>2</sub> eq] (Location-Based)	Percentage of Total Emissions (Location-Based)
Scope 1: Refrigerant Emissions*	0,000	0 %
Scope 1: Stationary Combustion**	73,552 t CO <sub>2</sub> eq	1,627 %
Scope 1: Mobile Combustion	3,185 t CO <sub>2</sub> eq	0,070 %
Scope 2: Electric Energy	3708,180 t CO <sub>2</sub> eq	82,035 %
Scope 2: Heating	735,325 t CO <sub>2</sub> eq	16,267 %

Total Emissions  
(Location -Based)



In the interest of transparency and the highest standards of environmental reporting, the Management Board and Executive Leadership of the Company have decided that this 2024 Carbon Footprint Report will undergo independent verification conducted by an external entity. The aim of this process is to confirm the compliance of the presented data and methodology with the requirements of ISO 14064-1 and the GHG Protocol, while also considering the criteria set out in **ISO 17029:2019** and **ISO 14064-3**.

The verification will include a comprehensive assessment of the completeness, accuracy, and clarity of the information presented, as well as the methodological approaches used for calculating greenhouse gas emissions. This process is intended not only to ensure the highest quality of reporting but also to strengthen stakeholder confidence in the environmental data provided.

The final result of the verification will be **an independent expert opinion** confirming the credibility and consistency of the report. This document will be formally attached to the report as Annex No. 1.

# Revision History

Release Date	Revision Number	Change History
01.07.2025	01	<ul style="list-style-type: none"> <li>Development of a new document</li> </ul>
10.07.2025	02	<ul style="list-style-type: none"> <li>Report approved by Top Management</li> <li>Update of the report's objective and clarification of stakeholders and interested parties</li> <li>Methodology update – added information about inclusion of CO<sub>2</sub> only in the calculation- Added explanation why only Scope 1 and 2 are covered; justification for excluding Scope 3</li> <li>Change of Scope 1 calculation method from DEFRA emission factors to KOBiZE factors</li> <li>Update of carbon footprint results for Scope 1 based on new emission factors (LPG, PB, ON)</li> <li>Added information on Market-Based and Location-Based emission sources</li> <li>Update of data uncertainty factor from 5.89% to 5%</li> <li>Update of all organizational carbon footprint values due to changes in Scope 1</li> <li>Added information on GWP</li> <li>Added information about planned third-party verification of the report</li> <li>Change in the order of report pages</li> </ul>



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