Report number:

**CO2-SC1.2-24/08**

Ongropack

# COMPANY CARBON FOOTPRINT SCOPE 1 AND 2 REPORT

## FOR ONGROPACK KFT.

**covering financial year 2023**
**(01.01.2023 – 31.12.2023)**

(According to The Greenhouse Gas Protocol,
Corporate Accounting and Reporting Standard)

CREDIT MANAGEMENT GROUP
CMG CARBON

**Created:** 18 September 2024
**Prepared by:** CMG Carbon Kft.

# Contents

# Summary

## Company data

**Name:**
Ongropack Kft.

**Registered office:**
3711 Szirmabesenyő, Miskolci utca 19.

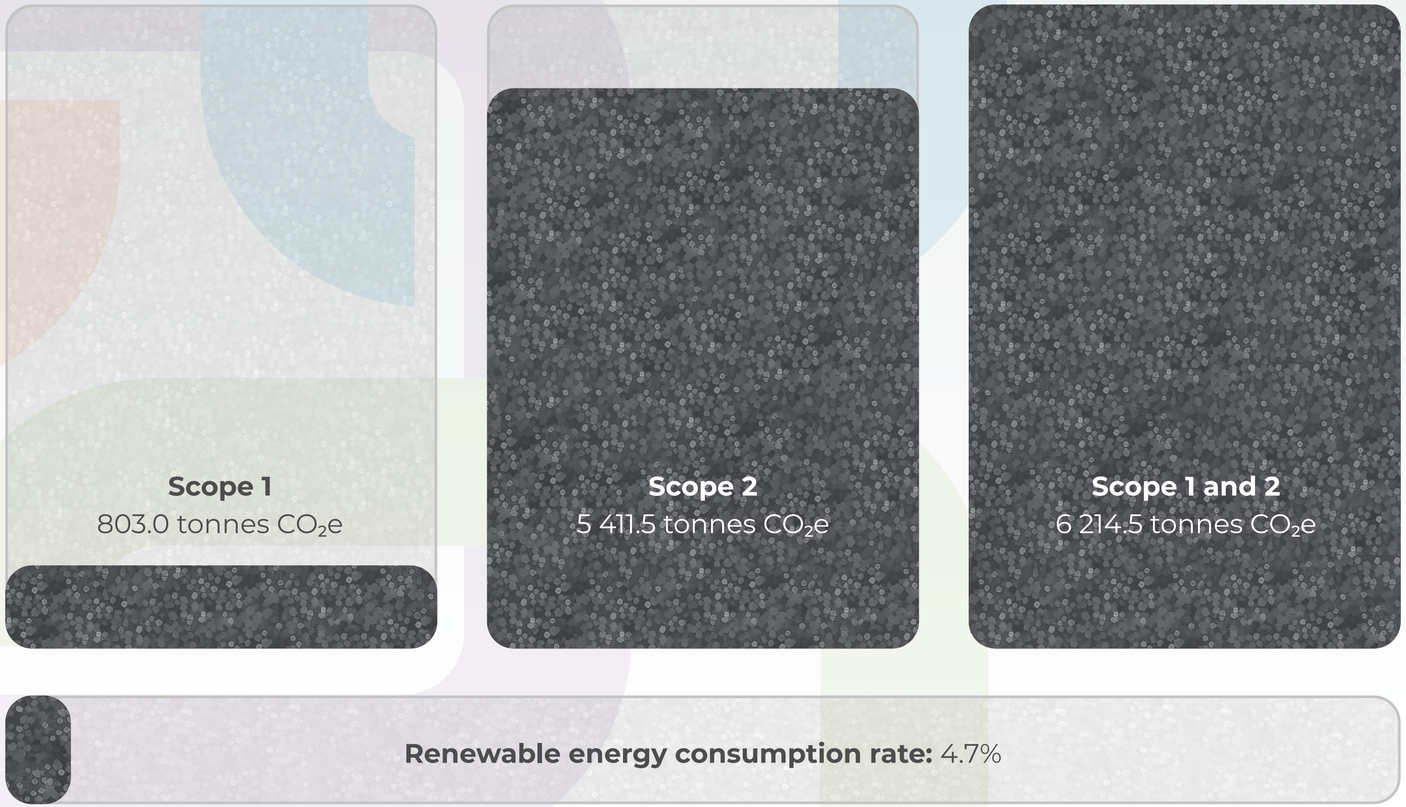
**Emission duration:**
Financial year 2023 (01.01.2023 – 31.12.2023)

### Ongropack Kft. Company emission location::

3711 Szirmabesenyő, Miskolci utca 19.

The $CO_2e$ emissions were calculated based on the energy and fuel consumption data supplied by Ongropack Kft. with respect to the financial year 01.01.2023 – 31.12.2023.

**Total emissions of the company:**



# 1. Total energy consumption at the company

The table below summarises the energy and fuel consumption data supplied by Ongropack Kft. with respect to the financial year 01.01.2023 – 31.12.2023.
The annual energy and fuel consumption data constitute the sources of Scope 1 and 2 emissions

## Energy baseline data of the company covering FY 2023 (01.01.2023 – 31.12.2023)

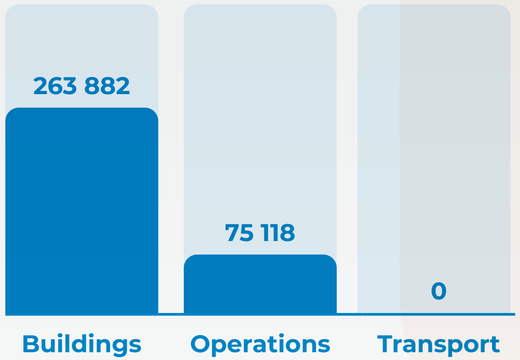
| Scope 1 sources – Purchased power consumption | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|
| Natural gas | $m^3$ /year | 339 000 | 263 882 | 75 118 | – |
| Petrol | litre /year | 22 088 | – | – | 22 088 |
| Diesel oil | litre /year | 35 433 | – | – | 35 433 |
| Forklift fuel gas | litre /year | – | – | – | – |
| **Total** | | **396 521** | **263 882** | **75 118** | **57 521** |

| Scope 2 sources | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|
| Purchased electricity | kWh/year | **14 825 965** | **2 053 423** | **12 772 542** | **–** |

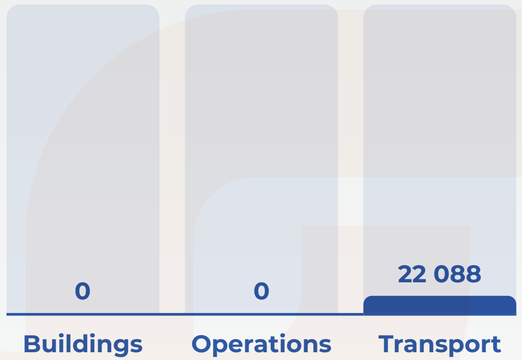
| Renewable energiasources | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|
| Solar power for electricity generation | kWh/year | 787 600 | – | 787 600 | – |
| Thermal energy generation by heat recovery units | kWh/year | 30 055 | – | 30 055 | – |
| Thermal energy generation by solar panels | kWh/year | 102 930 | 102 930 | – | – |
| **Total** | | **920 585** | **102 930** | **817 655** | **–** |

## Annual purchased energy consumption

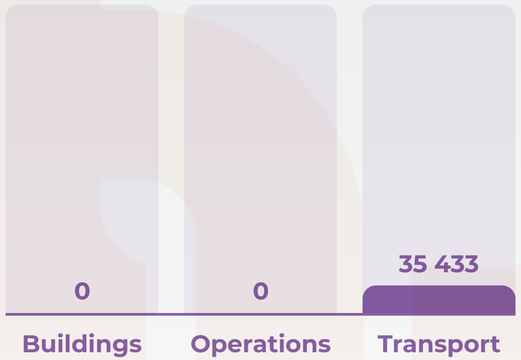
### Natural gas, m³/year



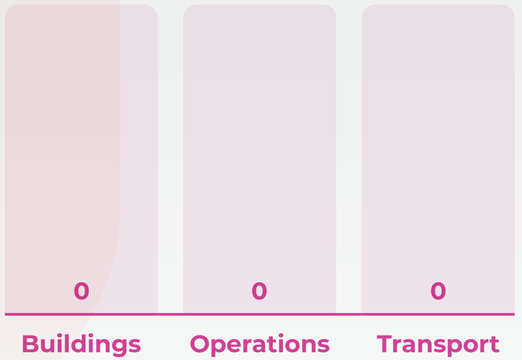

### Petrol, litre/year



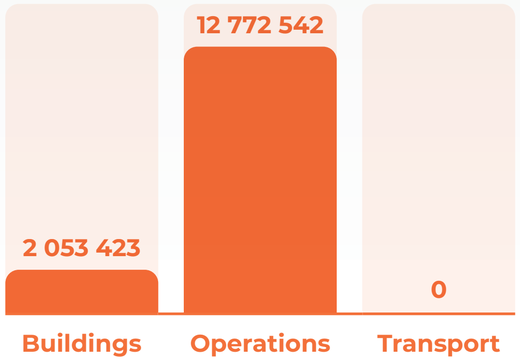

### Diesel oil, litre/year




### Forklift fuel gas, litre/year

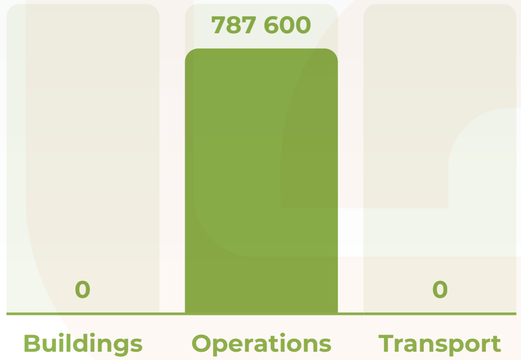



## Annual purchased electricity consumption, kWh/year

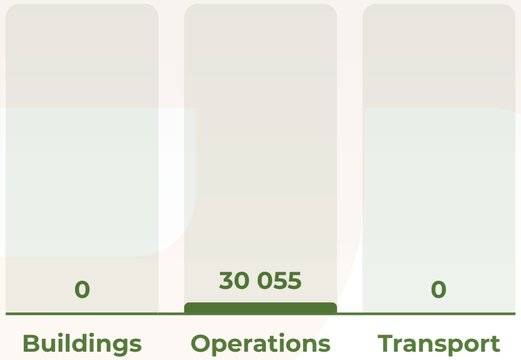



## Annual Renewable energiasources

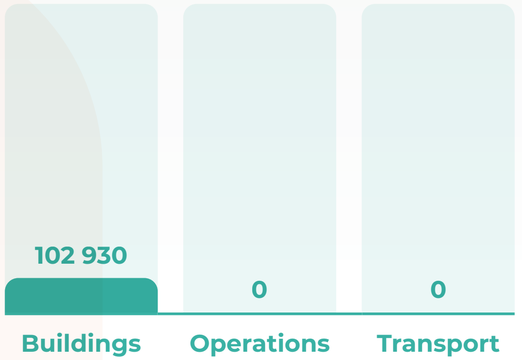
### Solar power for electricity generation, kWh/year




### Thermal energy generation by heat recovery units, kWh/year




### Thermal energy generation by solar panels, kWh/year



## Total energy consumption of the company in FY 2023, MJ/year

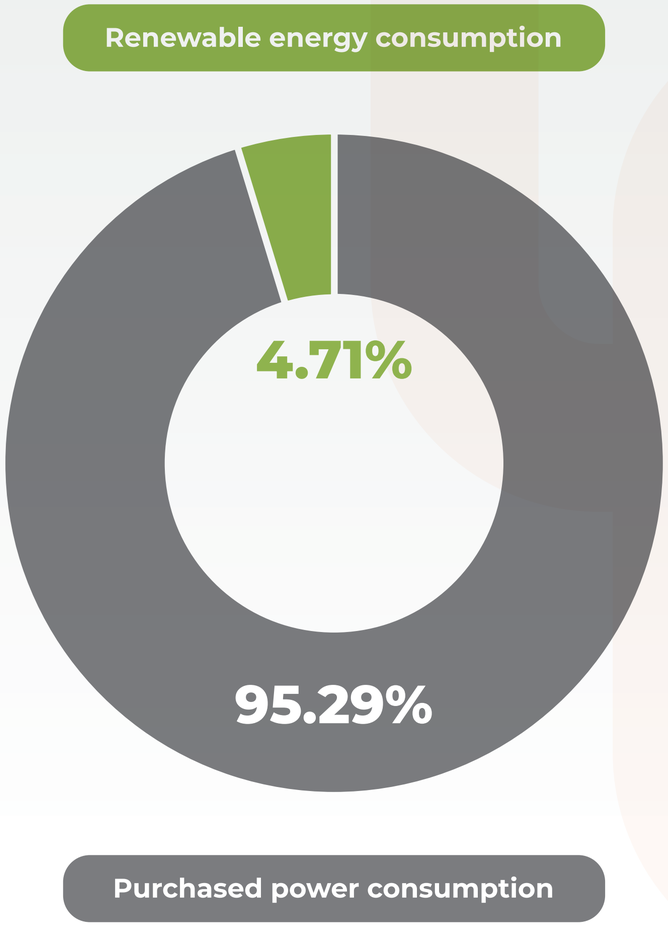
| Summary account of annual energy consumptions | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|
| **Energy type** | **%** | **MJ/year** | **MJ/year** | **MJ/year** | **MJ/year** |
| Purchased power consumption | 95.29% | 67 119 932 | 16 566 532 | 48 592 716 | 1 960 684 |
| Renewable energy consumption | 4.71% | 3 314 105 | 370 548 | 2 943 557 | – |
| **Total** | **100%** | **70 434 037** | **16 937 080** | **51 536 272** | **1 960 684** |

## Annual purchased energy use of the company, MJ/year

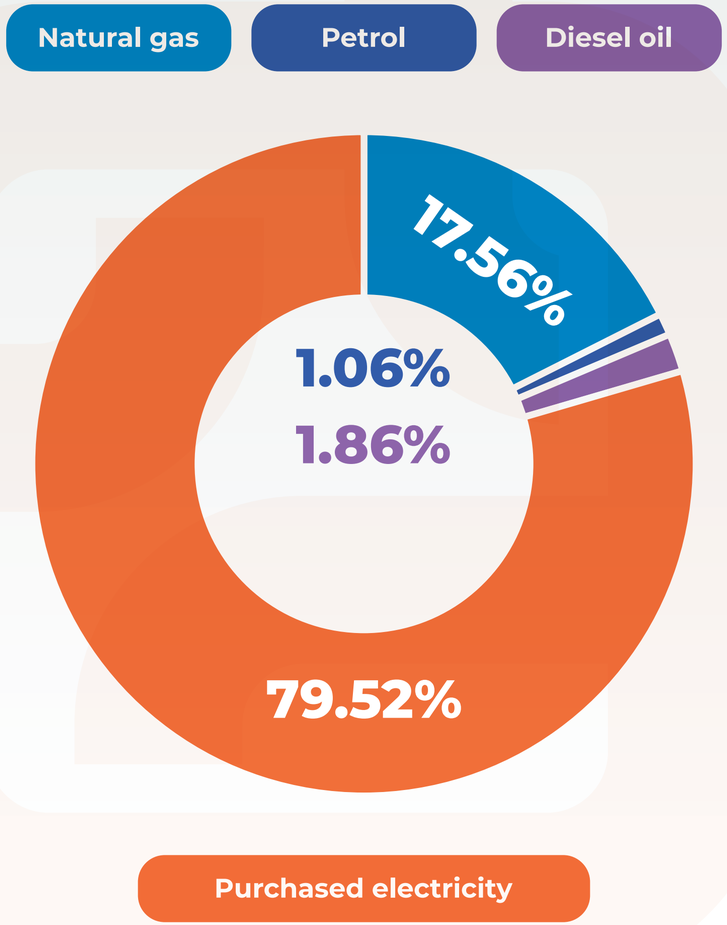
| Annual purchased energy use | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|
| **Energy type** | **%** | **MJ/year** | **MJ/year** | **MJ/year** | **MJ/year** |
| Natural gas | 16.73% | 11 785 774 | **9 174 209** | **2 611 565** | – |
| Petrol | 1.01% | 713 442 | – | – | 713 442 |
| Diesel oil | 1.77% | 1 247 242 | – | – | 1 247 242 |
| Forklift fuel gas | 0% | – | – | – | – |
| Purchased electricity | 75.78% | 53 373 474 | **7 392 323** | **45 981 151** | – |
| **Total** | **95.29%** | **67 119 932** | **16 566 532** | **48 592 716** | **1 960 684** |

**The shades of red indicate particularly high energy use.**

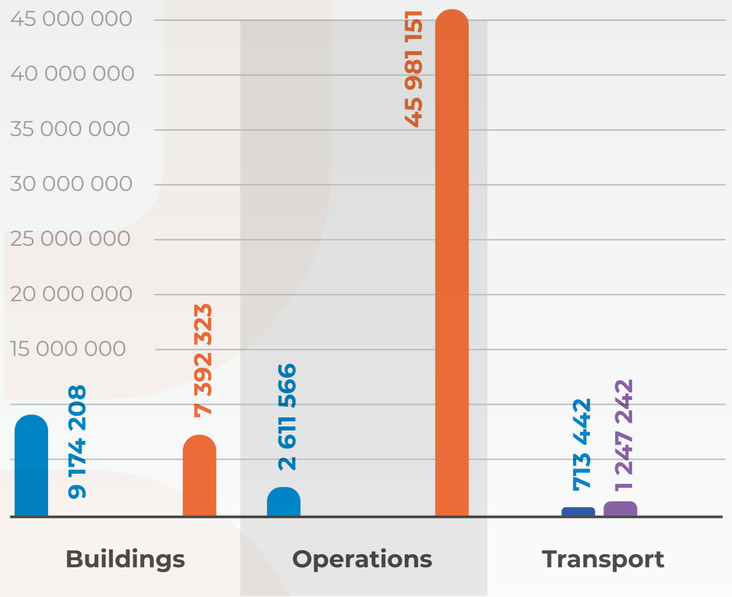
## Summary account of annual energy consumptions, MJ/year




## Summary account of annual purchased power consumption, MJ/year




## Energy consumption of the company per category in FY 2023, MJ/year




Of all energy, Ongropack Kft. electricity use is the highest. This is followed by natural gas use. Petrol and diesel oil is used the least.

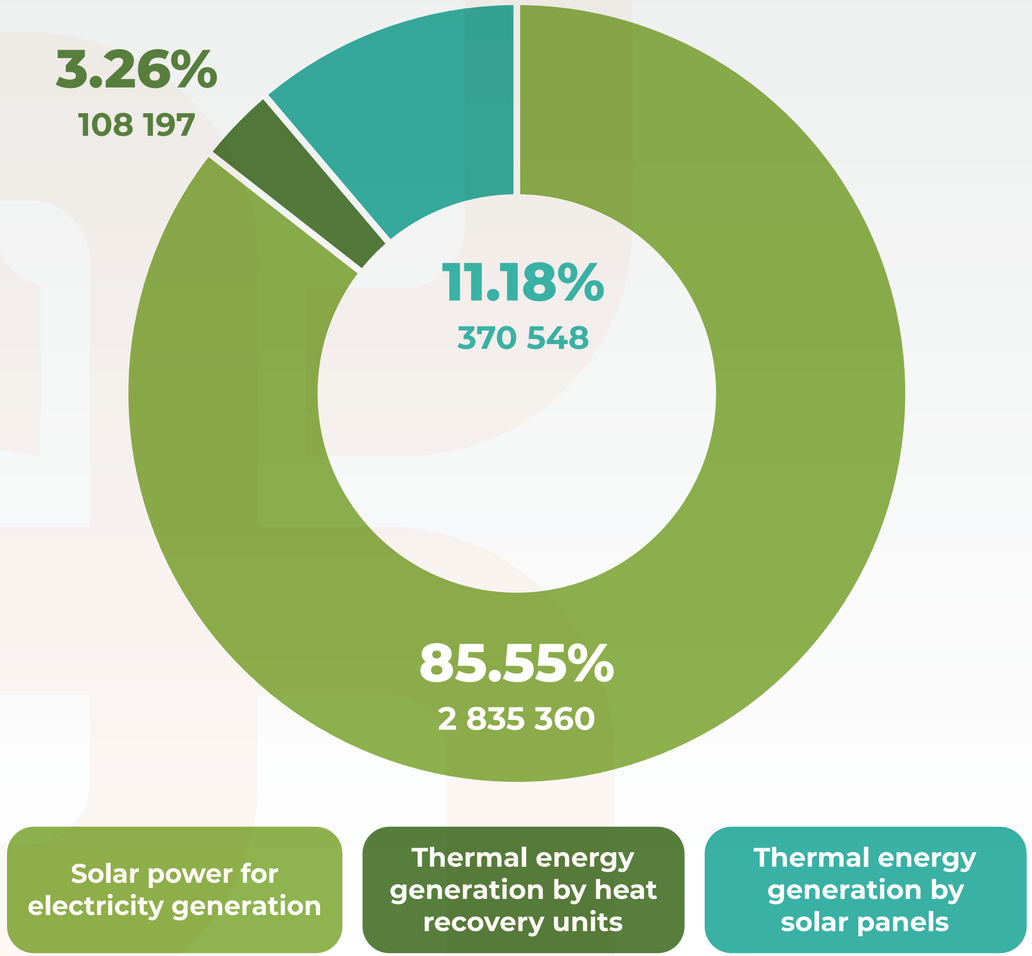
Electricity consumed by manufacturing activities constitutes the highest energy use of Ongropack Kft.

## Annual renewable energy use of the company, MJ/year

| Annual renewable energy use | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|
| **Energy type** | **%** | **MJ/year** | **MJ/year** | **MJ/year** | **MJ/year** |
| Solar power for electricity generation | 4.03% | 2 835 360 | – | 2 835 360 | – |
| Thermal energy generation by heat recovery units | 0.15% | 108 197 | – | 108 197 | – |
| Thermal energy generation by solar panels | 0.53% | 370 548 | 370 548 | – | – |
| **Total** | **4.71%** | **3 314 105** | **370 548** | **2 943 557** | **–** |

The highest renewable energy consumption of Ongropack Kft. comes from the electricity generated by the 1.7 MWp PV system put into operation on 10 August 2023, and the hot water generated by the solar panels of the plants and the heat recovery heating system.

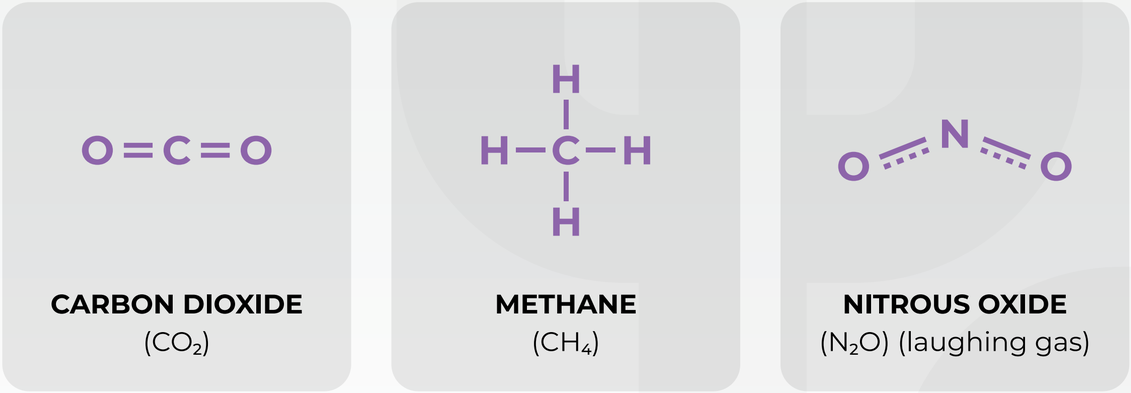
## Summary account of annual energy consumptions, MJ/year



# 2. Method of calculating the $CO_2$ equivalent

The carbon dioxide equivalent ($CO_2e$) is the term used as the sum of the most common greenhouse gases as defined in the Kyoto Protocol.

**Leggyakoribb üvegházhatású gázok:**



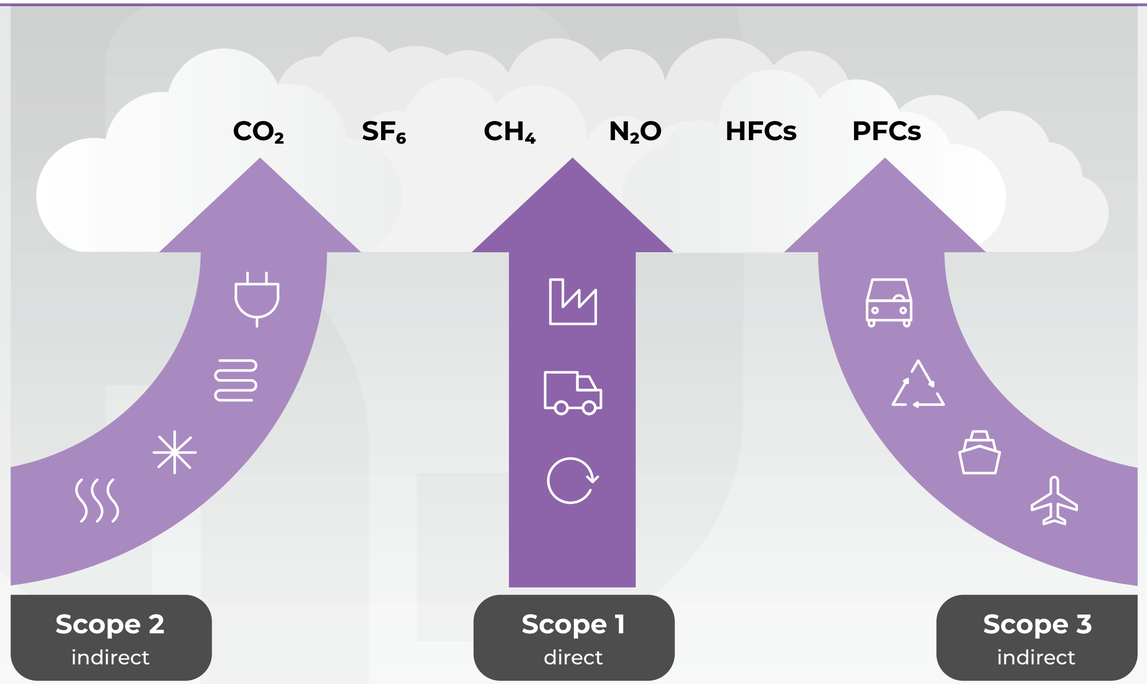

**CARBON DIOXIDE**
($CO_2$)

**METHANE**
($CH_4$)

**NITROUS OXIDE**
($N_2O$) (laughing gas)

The $CO_2$ equivalents of the different emission sources need to be aggregated to determine a company's carbon footprint. Sources of emissions can be direct or indirect in nature. Accordingly, **Scope 1, 2 and 3** categories were defined in the following standards:

- **The Greenhouse Gas Protocol, Corporate Accounting and Reporting Standard**
- **ISO14064-1-2018: Greenhouse Gas**




**Scope 1** **On-site (direct) emissions by the company,** such as natural gas combustion, production technology emissions, transport vehicle emissions, etc.

**Scope 2** **Indirect emissions,** such as electricity, district heating, steam, etc., which are generated elsewhere, but the company is responsible for emissions on account of their use.

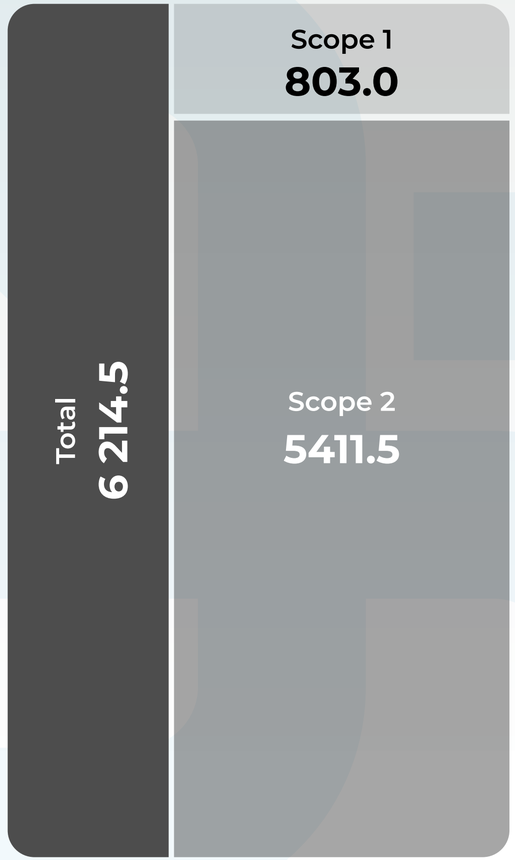
**Scope 3** **Indirect emissions beyond the company's control,** but the company is responsible on account of their use, such as waste processing, waste water treatment, public transport, etc.

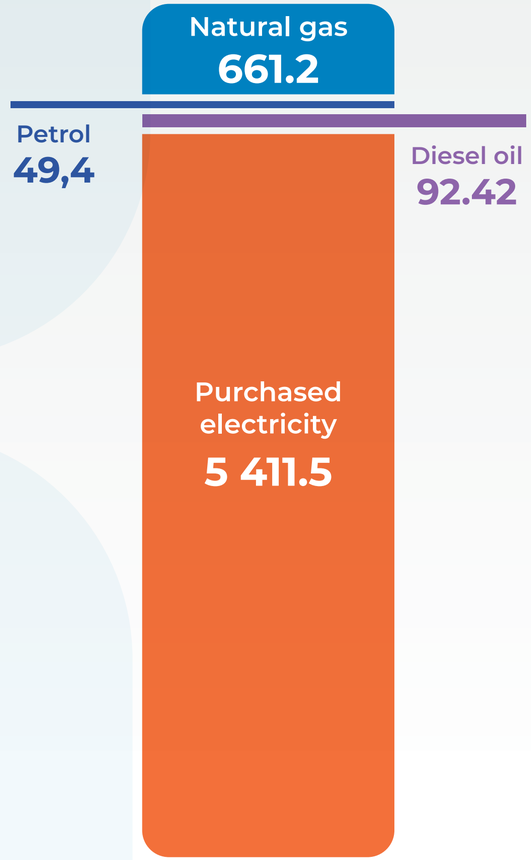
# 3. Total Scope 1 and 2 emissions of the company, t $CO_2e$/year

## Total Scope 1 and 2 emissions of the company in FY 2023, t $CO_2e$/year

| Scope | Emission sources | t $CO_2$/year | t $CH_4$/year | t $N_2O$/year | t $CO_2e$/year | % |
|---|---|---|---|---|---|---|
| Scope 1 | Natural gas | 661.18 | 0.0118 | 0.0012 | 661.2 | 10.6% |
| | Petrol | 49.44 | 0.0021 | 0.0004 | 49.4 | 0.8% |
| | Diesel oil | 92.42 | 0.0037 | 0.0007 | 92.4 | 1.5% |
| | Forklift fuel gas | – | – | – | – | 0% |
| | **Total** | **803.04** | **0.0177** | **0.0024** | **803.0** | **12.9%** |
| Scope 2 | Purchased electricity | 5 411.48 | – | – | 5411.5 | 87.1% |
| **Total** | | **6 214.52** | **0.0177** | **0.0024** | **6214.5** | **100%** |

| Total annual Scope 1 and 2 emissions of the sites | t $CO_2e$/year | % |
|---|---|---|
| Scope 1 | 803.0 | 12.9% |
| Scope 2 | 5 411.5 | 87.1% |
| **Total** | **6 214.5** | **100%** |



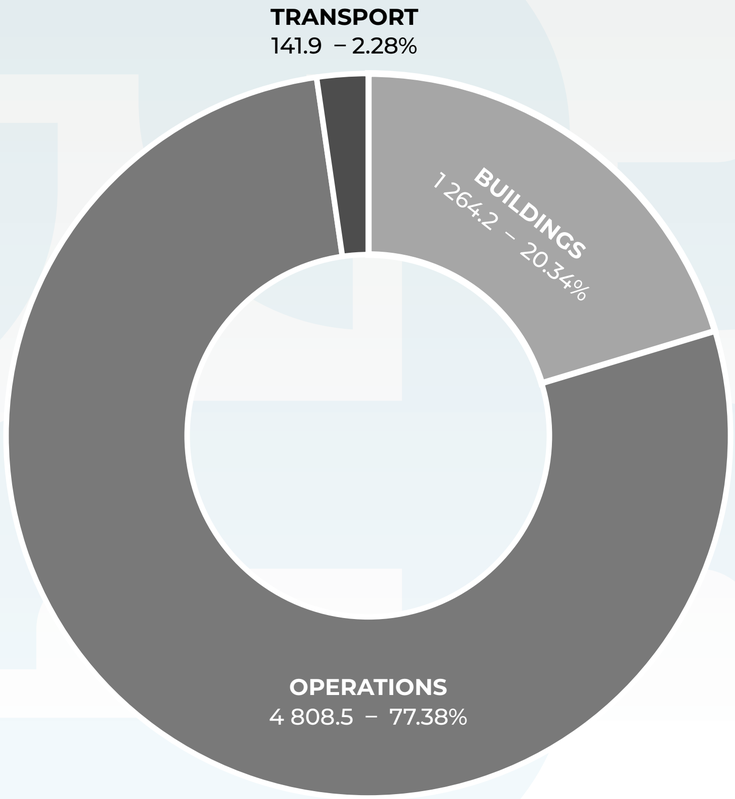



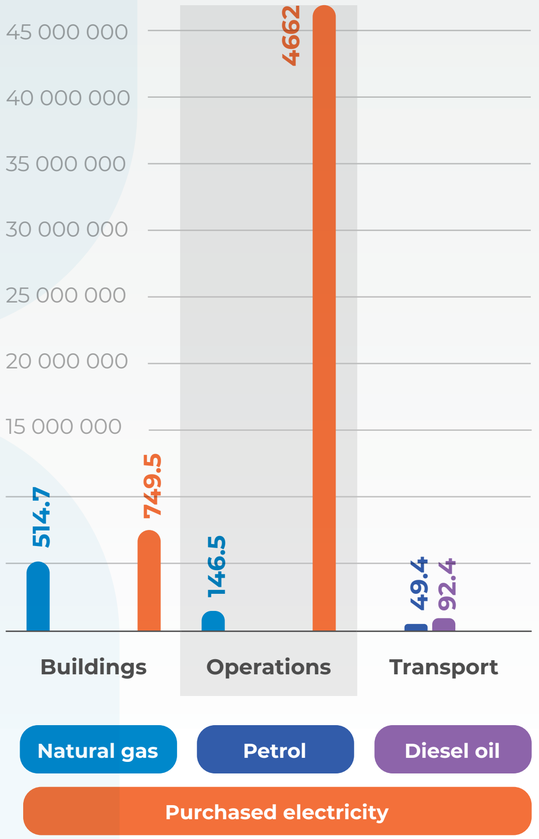
# Scope 1 and 2 emissions of the company in FY 2023, t $CO_2e$/year

| Scope | t $CO_2e$/year | | Company Total | Buildings | Operations | Transport |
|---|---|---|---|---|---|---|
| Scope 1 | Natural gas | 10.6% | 661.2 | 514.7 | 146.5 | – |
| | Petrol | 0.8% | 49.4 | – | – | 49.4 |
| | Diesel oil | 1.5% | 92.4 | – | – | 92.4 |
| | Forklift fuel gas | 0% | – | – | – | – |
| | **Total** | 12.9% | 803.0 | 514.7 | 146.5 | 141.9 |
| Scope 2 | Purchased electricity | 87.1% | 5 411.5 | 749.5 | 4 662.0 | – |
| **Total** | | 100% | 6 214.5 | 1 264.2 | 4 808.5 | 141.9 |

**The shades of red indicate particularly high energy use.**

## Total annual Scope 1 and 2 emissions of the company, t $CO_2e$/year



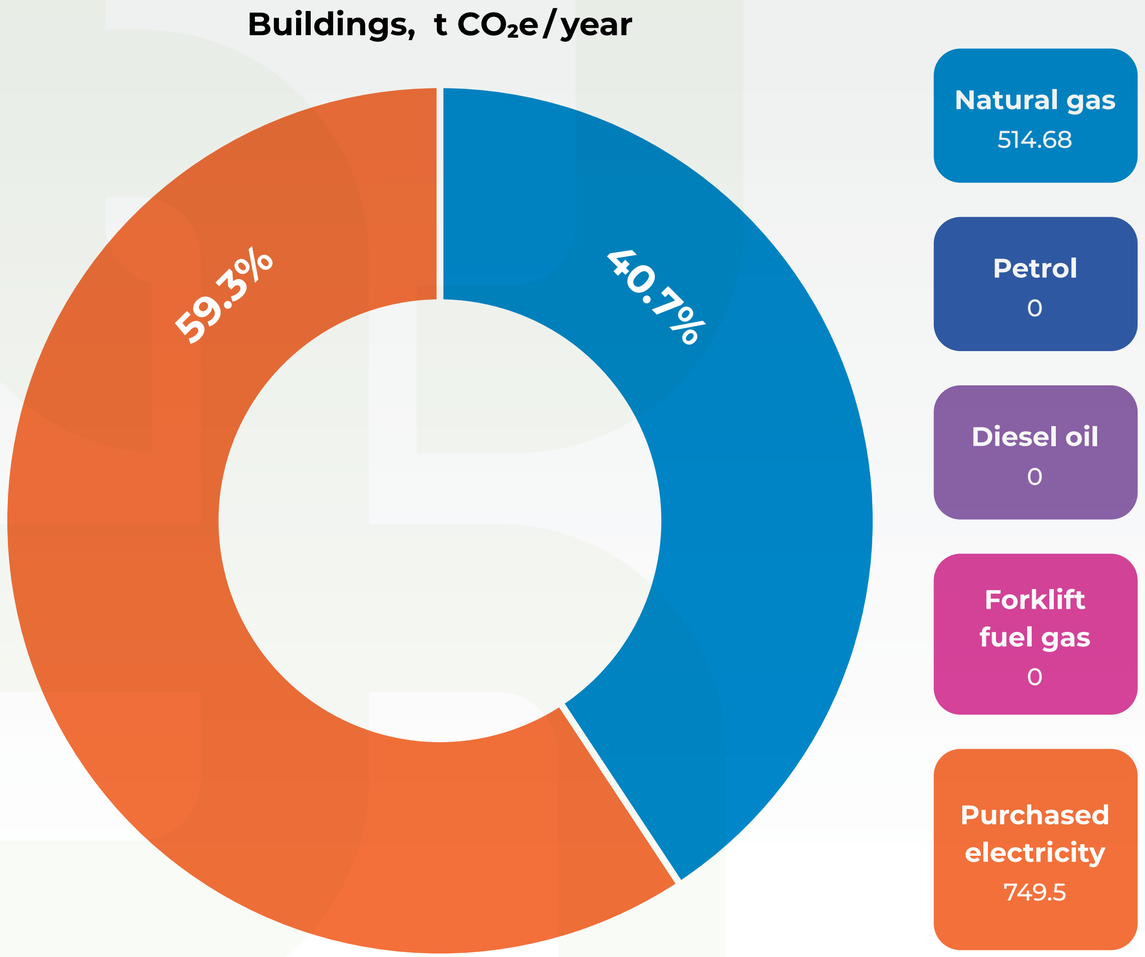



# 4. Scope 1 and 2 emissions of the company, t $CO_2e$/year

## 4.1 Scope 1 and 2 emissions of buildings

| Scope | Emission sources | t $CO_2$/year | t $CH_4$/year | t $N_2O$/year | t $CO_2e$/year | % |
|---|---|---|---|---|---|---|
| Scope 1 | Natural gas | 514.67 | 0.0092 | 0.0009 | 514.68 | 40.7% |
| | Petrol | – | – | – | 0 | 0% |
| | Diesel oil | – | – | – | 0 | 0% |
| | Forklift fuel gas | – | – | – | 0 | 0% |
| | **Total** | **514.67** | **0.0092** | **0.0009** | **514.68** | **40.7%** |
| Scope 2 | Purchased electricity | 749.5 | – | 0 | 749.5 | 59.3% |
| **Total** | | **1264.17** | **0.0092** | **0.0009** | **1264.18** | **100%** |

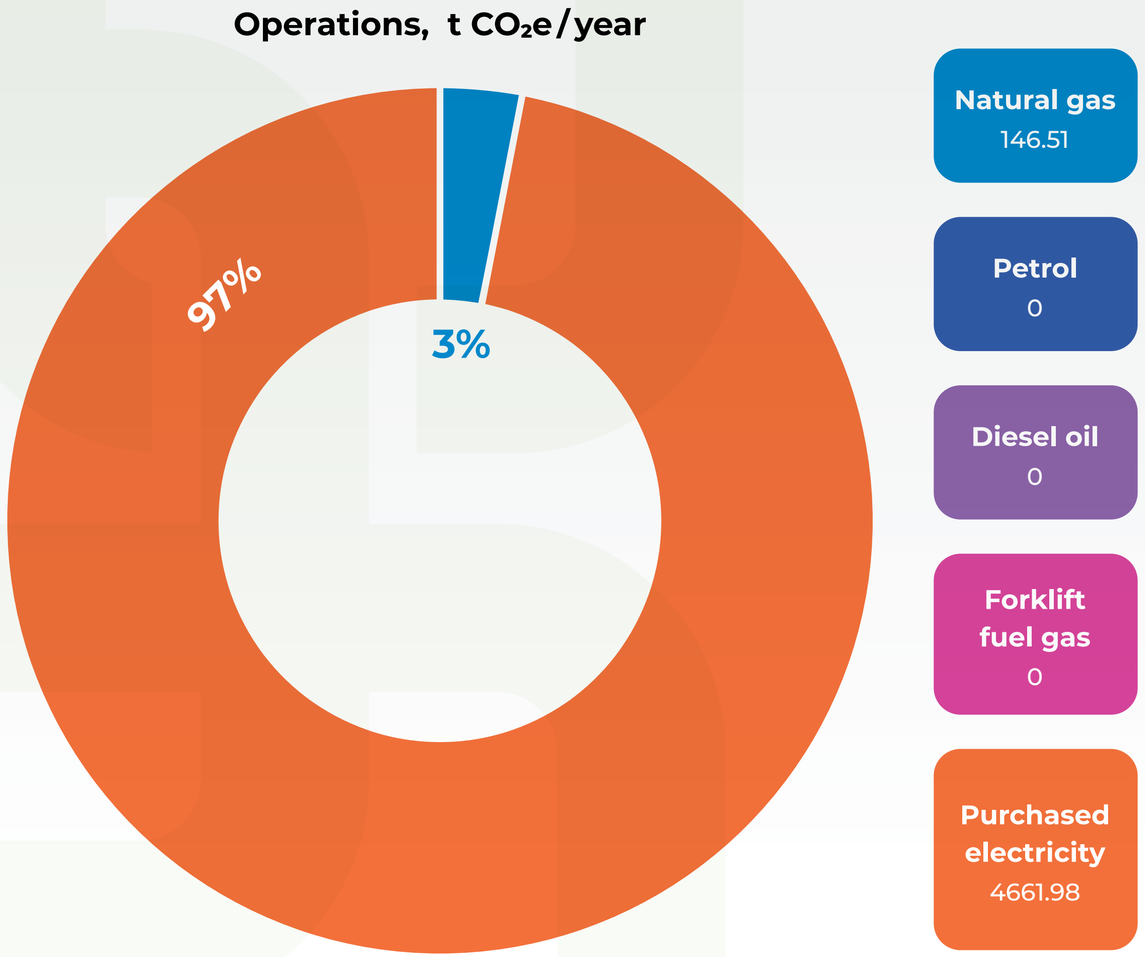
| Total emissions | t $CO_2$/year | % |
|---|---|---|
| Scope 1 | 514.68 | 40.71% |
| Scope 2 | 749.50 | 59.29% |
| **Total** | **1264.18** | **100%** |



## 4.2 Scope 1 and 2 emissions of operations

| Scope | Emission sources | t $CO_2$ /year | t $CH_4$ /year | t $N_2O$ /year | t $CO_2e$/year | % |
|---|---|---|---|---|---|---|
| Scope 1 | Natural gas | 146.51 | 0.0026 | 0.0003 | 146.51 | 3% |
| | Petrol | – | – | – | – | 0% |
| | Diesel oil | – | – | – | – | 0% |
| | Forklift fuel gas | – | – | – | – | 0% |
| | **Total** | **146.51** | **0.0026** | **0.0003** | **146.51** | **3%** |
| Scope 2 | Purchased electricity | 4661.98 | – | – | 4661.98 | 97% |
| **Total** | | **4808.49** | **0.0026** | **0.0003** | **4808.49** | **100%** |

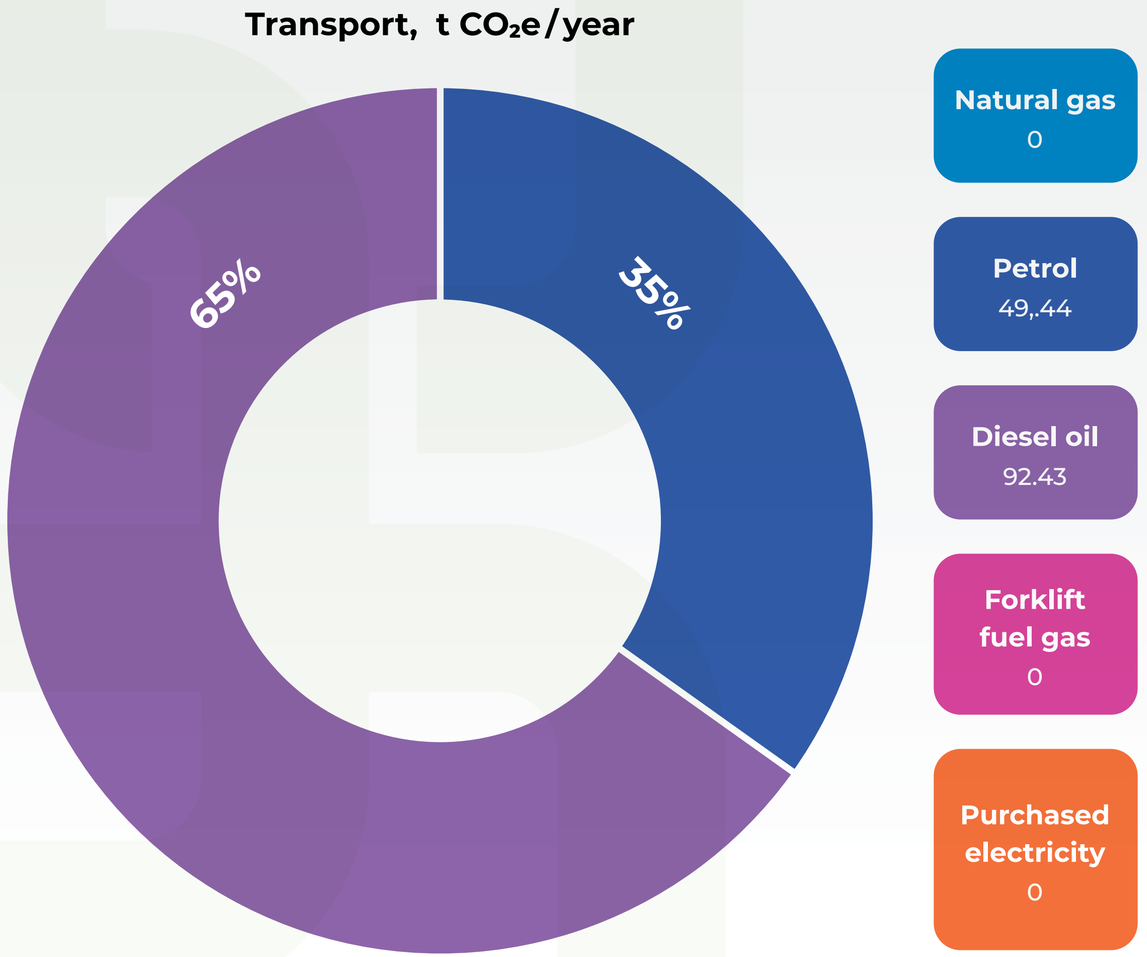
| Total emissions | t $CO_2$ /year | % |
|---|---|---|
| Scope 1 | 146.51 | 3% |
| Scope 2 | 4 661.98 | 97% |
| **Total** | **4 808.49** | **100%** |



## 4.3 Scope 1 and 2 emissions of transport

| Scope | Emission sources | t $CO_2$ /year | t $CH_4$ /year | t $N_2O$ /year | t $CO_2e$/year | % |
|---|---|---|---|---|---|---|
| Scope 1 | Natural gas | – | – | – | – | 0% |
| | Petrol | 49.44 | 0.0021 | 0.0004 | 49.44 | 34.9% |
| | Diesel oil | 92.42 | 0.0037 | 0.0007 | 92.43 | 65.1% |
| | Forklift fuel gas | – | – | – | – | 0% |
| | **Total** | **141.86** | **0.0059** | **0.0012** | **141.87** | **100%** |
| Scope 2 | Purchased electricity | – | – | – | – | 0% |
| **Total** | | **141.86** | **0.0059** | **0.0012** | **141.87** | **100%** |

| Total emissions | t $CO_2$ /year | % |
|---|---|---|
| Scope 1 | 141.87 | 100% |
| Scope 2 | 0 | 0% |
| **Total** | **141.87** | **100%** |



CREDIT MANAGEMENT GROUP

CMG CARBON

I, the undersigned auditor, hereby declare that the Scope 1 and 2 emission values in this report were calculated based on the energy and fuel consumption data supplied by the company.

**18 September 2024**

**György Sitku**
energy auditor
EA-01-23/2016 • CMG Carbon Kft.