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* This document is fully electronically signed on 2025 02 20.

CO2 Performance Ladder

Emission inventory 2023

Table of contents

1. Introduction

To contribute to global net-zero goals of the ENGIE group, in 2021 Tractebel set in motion its first action plan to reduce its carbon emissions by 5% per year on average, in line with COP21 & Science Based Targets initiative (SBTi) recommendations.

As part of the carbon neutrality ambition, Tractebel Belgium is committed to certification for CO2 Performance Ladder – level 3 in early 2025.

The energy consumption and CO_2 emission sources we consider are:

CO_2 Emission / Energy Categories		**GHG Scopes**
Fleet	Emission from company vehicles, either owned or leased.	
	• Direct emissions from fuel combustion • Indirect emissions from electricity usage in PHEV and EV.	1 2
Administrative Buildings	Emissions related to the usage of primary energy (Natural gas)	1
	Indirect emissions related to the generation of purchased energy streams (electricity, heat, cold)	2
	Fugitive emission from refrigerants	1
Business Travel	Emissions from fuel combustion for transport means used	3
Digital	Emissions related to the electricity consumption of equipment (smartphone, printers, laptops, etc.) and of data storage and transfer.	2

The base year for this first emission inventory report is **2023**.

2. Calculation method

Based on ENGIE' requirements for carbon footprint assessment of work practices, Tractebel CORP has developed its Carbon Neutral Footprint method and governance rules applicable to all Tractebel Belgium's entities.

The energy and CO_2 emission categories considered in this method include the categories mentioned above.

2.1. Emission factors

The Carbon Neutral Footprint method has been checked to ensure that it complies with the requirements of CO2PL for the emission inventory.

Since the emission factors of this method are different from those published on the website recommended for the CO2 PL, we have decided to make a **CO2 PL specific inventory tool**. It is an excel file with emission factors to be updated manually according to CO_2emissiefactoren.be.

2.2. Data collection

Data collection is done in the course of the annual Carbon Neutral Footprint reporting in all Tractebel entities.

Data sources are different according the categories:

CO_2 emission category	**Data Source**
Fleet	Fleet manager (external)
Administrative Buildings	ENGIE Real Estate / GBS
Business Travel	AMEX travel agency
Digital	ENGIE IT

When all the data for Tractebel Belgium are available, they are handed over to the **CO2PL Officer**. This person enters the data into the **CO2 PL specific inventory tool** for further processing, analysis and production of graphs that allow to visualize results.

3. Results analysis

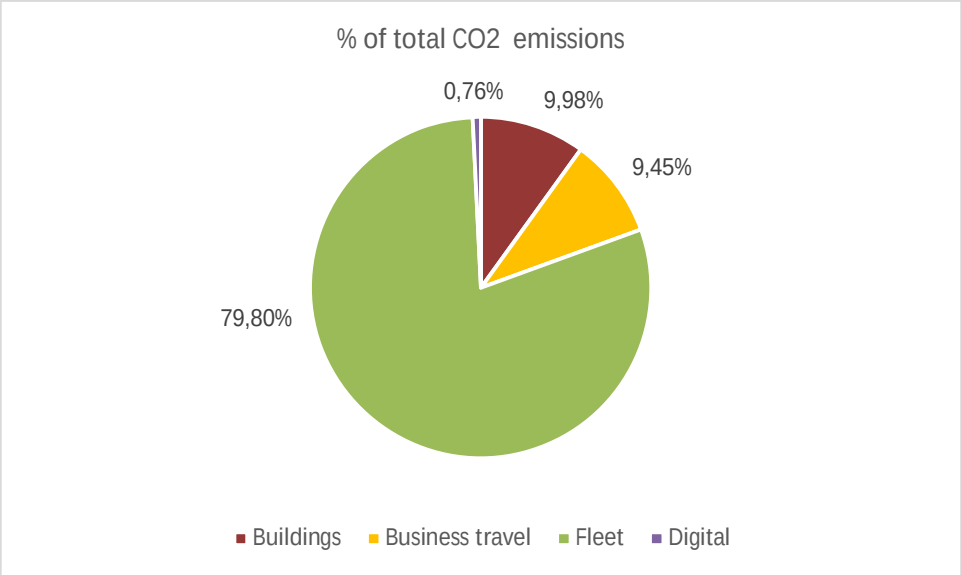
3.1. Total emissions

The **total CO_2 emissions** for the year 2023 over the different categories are

Category	Total (T CO2)
Buildings	479,700
Business travel	454,147
Fleet	3833,934
Digital	36,430
Grand Total	**4804,210**

T CO2

The **percentage distribution** over the categories is



The CO_2 emissions for the category **fleet** are **8 times** that of Buildings and of Business travel. The contribution of the category Digital is very small, less than 1%.

The **CO_2 emissions per employee** for the different categories are

Number of employees in 2023: 1287 FTE

Category	Per employee (T CO2)
Buildings	0,373
Business travel	0,353
Fleet	2,979
Digital	0,028
Grand Total	**3,733**

We look also at the **CO_2 emissions in relation to turnover**, to determine in the following years whether an increase/decrease in the CO_2 emissions is the result of an increase/decrease in activities.

TO Tractebel BE 2023 : 253,63 M€

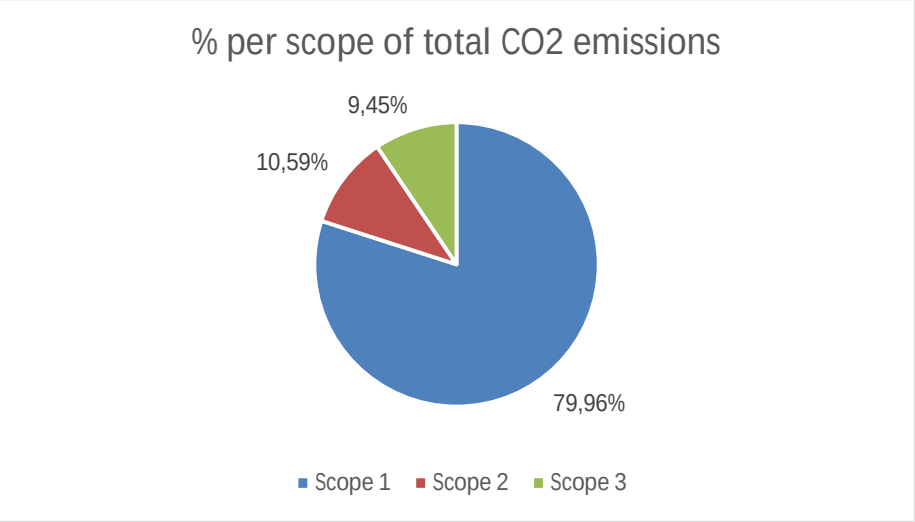
Category	Per TO (TCO2)
Buildings	1,891
Business travel	1,791
Fleet	15,116
Digital	0,144
Grand Total	**18,942**

3.2. Emissions per scope 1, 2 and 3

The CO2 emissions for the year 2023 over the three scopes are

Category	Fleet	Buildings	Business travel	Digital	Total
Scope 1	3751,28	90,19			3841,48
Scope 2	82,65	389,51		36,43	508,59
Scope 3			454,15		454,15
				Grand Total	**4804,21**

The **percentage distribution** over the three scopes is



Scope 1 emissions account for **80%** of the total CO_2 emissions. **11%** of total emissions are **scope 2**, and **9,5%** are **scope 3** emissions.

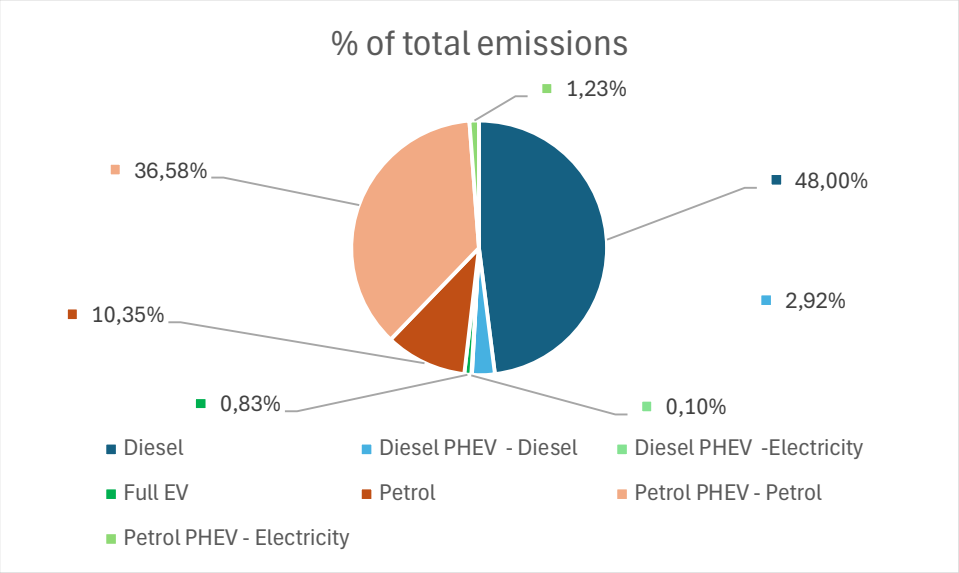
3.3. Fleet Results

For fleet, the CO_2 emissions in 2023 amount to **3833,934** T CO2e, which account for **80%** of the total CO_2 emissions.

The CO_2 emissions per **vehicle type & energy flow** are

Type	Energy flow	Emissions	
		Metric Ton CO2,eq	
Diesel	Diesel	1840,35	
Diesel PHEV			
	Diesel	111,81	
	Electricity	3,82	
Full EV	Electricity	31,65	
Petrol	Petrol	396,90	
Petrol PHEV			
	Petrol	1402,33	
	Electricity	47,08	
		3833,93	**Total**

The **percentage distribution** per vehicle type & energy flow is



Diesel accounts for 50,92% and petrol accounts for 46,93% of the total CO_2 emissions. Electricity accounts only for 2,15%.

Conclusion: Fleet CO_2 emissions in 2023 is mainly **fuel based**.

3.4. Building Results

For Buildings, the CO2 emissions in 2023 amount to **479,70** T CO2e, which account for **9,98%** of the total CO2 emissions.

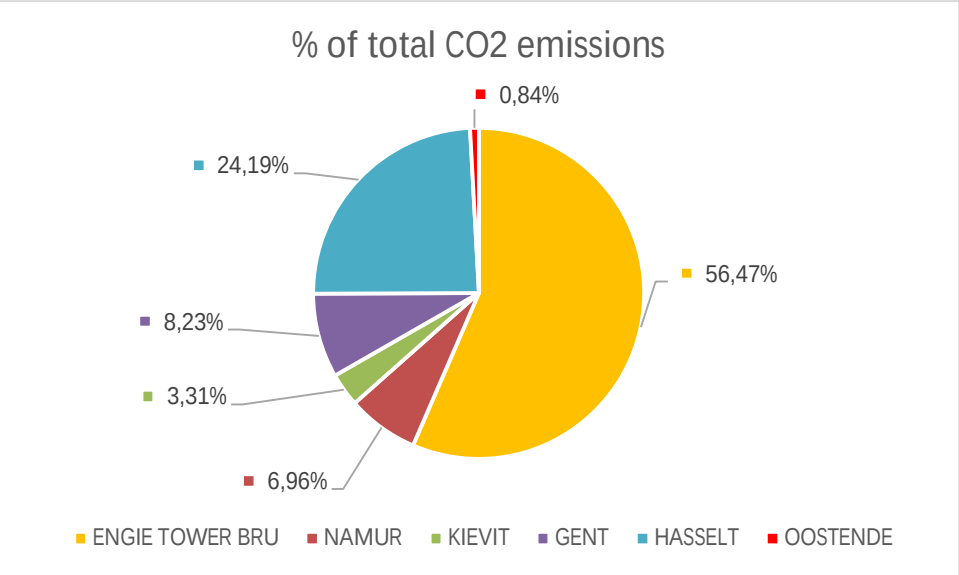
The CO_2 emissions per **Building** and per **energy flow** are

Building name	Emissions from fuel combustion	Emissions from electricity	Total emissions
	Metric ton CO2,eq	*Metric ton CO2,eq*	*Metric ton CO2,eq*
ENGIE TOWER BRU	16,11	254,80	270,91
NAMUR	12,74	20,63	33,37
KIEVIT	3,84	12,04	15,88
GENT	9,54	29,92	39,46
HASSELT	47,03	68,99	116,02
OOSTENDE	0,93	3,12	4,05
	90,19	389,51	
		Grand total	479,70

The fuel in all buildings is natural gas. There is no combustion of biomass.

Engie Tower in Brussels uses geothermal energy for heating and cooling, which explains that CO_2 emissions from electricity accounts for **94%** of the total emissions.

The **percentage distribution** per Building is



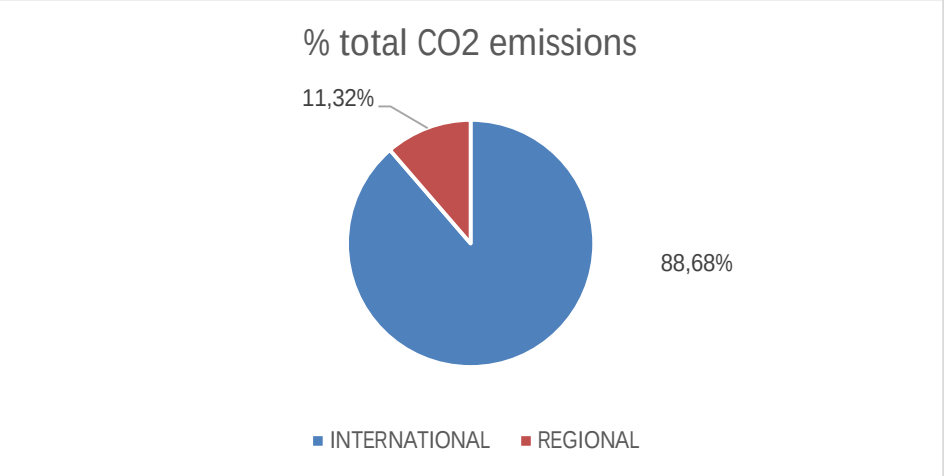
Engie Tower Brussels and Hasselt are the main contributors, they account respectively for **56,47%** and **24,19%** of the total CO2 emissions, together **80,66%**.

3.5. Business travel Results

Business travel data is collected through monthly reporting from AMEX.

Total emissions for train travel in 2023 amounts to **20,720** T CO2e and for air travel to **433,427** T CO2e.
Hence, total travel emissions in 2023 : **454,147 T CO2e**

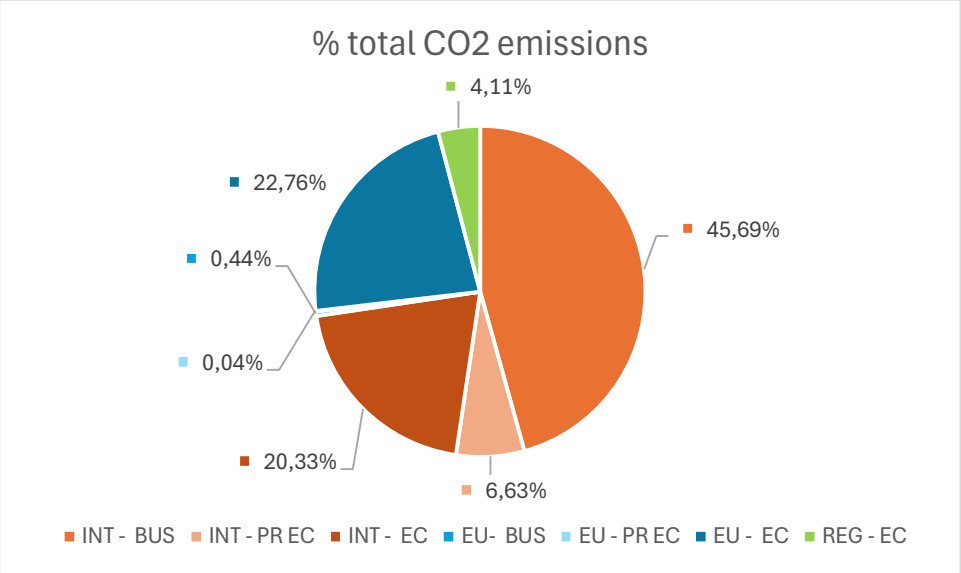
The **percentage distribution** per type of train is

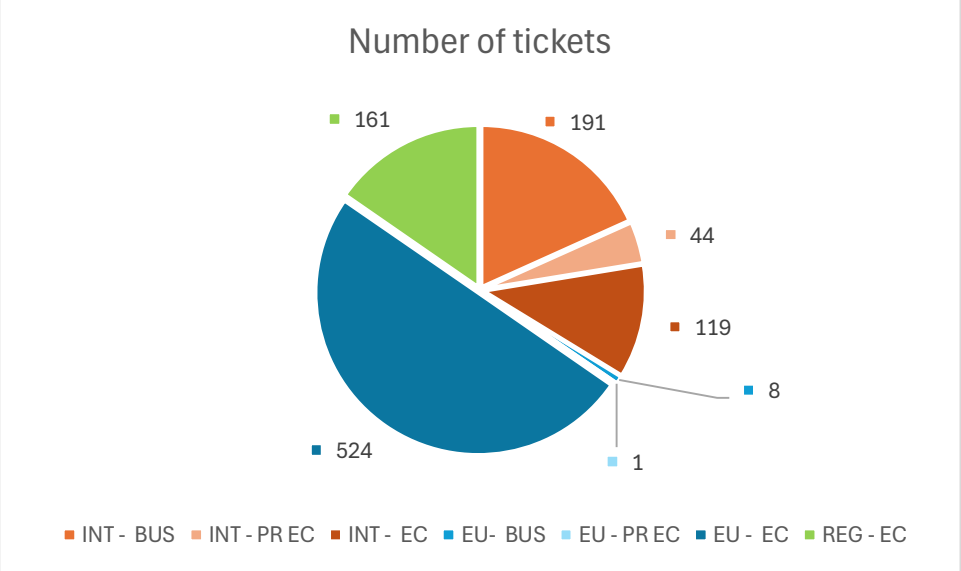


Number of tickets: 4325 international and 1366 regional trains.

The average CO2 emissions per international ticket is **4,34 KCO2e** and per regional ticket it is **1,72 KCO2e.**

The **percentage distribution** per type of flight is





Legend:

INT – BUS : international Business
INT – PR EC: International Premium Economy
INT – EC: International Economy
EU – BUS : European Business
EU – PR EC: European Premium Economy
EU – EC: European Economy
REG – EC: Regional Economy

International flights are the main contributors to the CO_2 emissions: **62,75 %** for **354** number of tickets (total tickets is 1048). The average CO2 emissions per ticket is **0,889,5 T CO2e.**

International flights in Business class account for **45,69 %** of all travel CO_2 emissions, for 191 number of tickets. The average CO2 emissions per business class ticket is **1,037 T CO2e.**

European flights account for **23,24 %** of all travel CO_2 emissions, for 533 number of tickets. The average CO2 emissions per ticket is **0,189 T CO2e.**

Regional flights account for 4,11 % of all travel CO_2 emissions, for 161 number of tickets. The average CO2 emissions per ticket is **0,110 T CO2e.**

3.6. Digital Results

Digital data is provided globally by ENGIE IT department.

However, when checking with the local IT department, data seem to be incorrect or cannot be confirmed.

Results show that emissions from digital usage are **very small, less than 1%,** compared to the other categories.

4. CO_2 compensation measures

Tractebel CORP has offset the 2023 emissions of its Ways Of Working (WOW) for all its entities: 13,8 KT CO2e has been offset.

This has been realized through 3 projects

Type	Project	Volume (KT CO2e)
REDD+	Kasigau Corridor in Kenya	7,0
Households	Engie Energy Access	4,0
ARR	Afforestation in France (carbon removal)	2,87
		13,87

In the next years, Tractebel CORP pursues its carbon offsetting program, in collaboration with the ENGIE group.

5. Exclusions

There is no combustion of biomass.

Refrigerants are not considered, as none of the buildings have systems where coolants need to be refilled.