

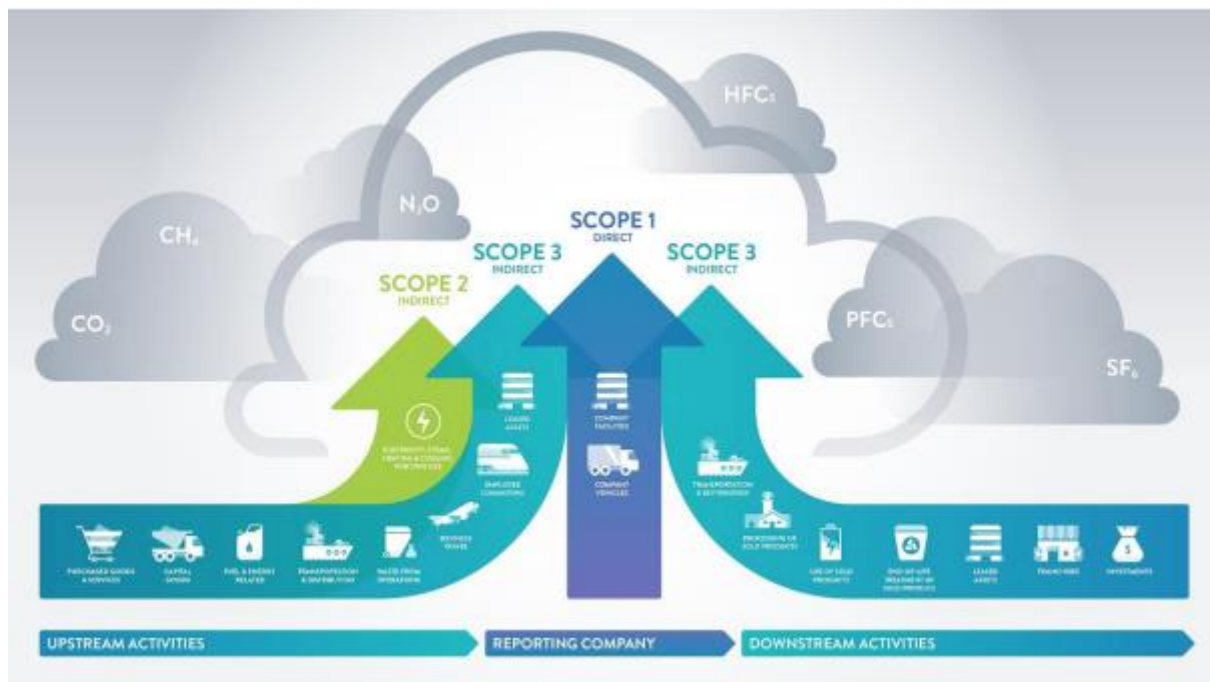
# OUR CO2 FOOTPRINT

## 1. Introduction

The CO2 footprint, also known as the 'Carbon Footprint', is the annual greenhouse gas emissions of an organization, particular activity, event, product or person. Greenhouse gases comprise the emissions that result from a (business) activity or the life cycle of a product. These emissions can be divided into:

- Scope 1: direct emissions from sources owned, or controlled, by the company (ex: fuel combustion)
- Scope 2: indirect emissions linked to energy (e.g.: purchase of electricity)
- Scope 3: indirect emissions (e.g.: purchase of materials, waste disposal, transport,...)

The following figure (source: GHG Protocol Corporate Value Chain Standard) gives an overview of the different types of emissions:



This document summarizes our 'Carbon Footprint Report', which was calculated and delivered by Encon. The report includes a detailed overview of the carbon footprint of Gheys Transport & Logistics at organization level.

*Encon : The calculation is fully in accordance with the Greenhouse Gas protocol and the applied methodology, practical approach and thresholds are discussed at length to demonstrate how an accurate footprint of all Gheys Transport & Logistics' business activities has been obtained. It provides Gheys Transport & Logistics with a clear and comprehensive overview of all factors contributing to their carbon footprint.*

## 2. Methodology

Company name	Gheys Transport & Logistics.
Description of the organization	Gheys Transport & Logistics offers logistic services to international producers, distributors, traders and processors in order to enable them to focus on their core business. Gheys is located in the centre of the European petrochemical cluster, in the heart of the European consumer market, enjoying a world-class transport and logistic infrastructure.
Calculation according to following standard:	Greenhouse Gas Protocol - Corporate standard
Chosen consolidation approach	Operational control: This means that a company takes into account 100% of the emissions released by its activities over which it has control. A company is assumed to have operational control over an activity if the company has full authority to set and implement its operational policies for the activity
Description and address of the site(s)	<ul style="list-style-type: none"> <li>• Gheys Transport, Voortstraat 19, 2400 Mol</li> <li>• Gheys Beheer, Voortstraat 19, 2400 Mol</li> <li>• Ghemotrans, Voortstraat 19, 2400 Mol</li> <li>• Belgian Logistic Center Site Mol, Zuiderring 102, 2400 Mol</li> <li>• Belgian Logistic Center Site Beringen, Industrieweg 158, 3580 Beringen</li> <li>• Belgian Logistic Center Site Genk, Geleenlaan 35, 3600 Genk</li> <li>• Kempisch Logistiek Platform, Voortstraat 19, 2400 Mol</li> <li>• Limburgs Logistiek Platform, Voortstraat 19, 2400 Mol</li> <li>• Kristotrans BV, Nieuwlandlaan 24, 3200 Aarschot</li> <li>• Witlox Logistics BV, Ambrosiusweg 15, 5081 NV Hilvarenbeek (Nederland)"</li> <li>• Belgian Cleaning Center, Industrieweg 156, 3583 Beringen</li> <li>• Gheys Energy, Voortstraat 19, 2400 Mol</li> <li>• Polish Logistic Platform, UL. STORRADY SWIETOSLAWY 1A/1B 43/45, P-71/602 SZCZECIN (Polen)</li> <li>• Gheys Qualy Storage, Zuiderring 102, 2400 Mol</li> <li>• Garage Gheys, Zuiderring 102, 2400 Mol</li> </ul>
Description of inventory boundary	<p>The activities of Gheys Transport &amp; Logistics which cause emissions can be summarized:</p> <ul style="list-style-type: none"> <li>• Electricity consumption by: office activities, lighting and other technical installations;</li> <li>• Fuel consumption due to: use of trucks, heating of the buildings, processes, use of passenger cars and forklifts;</li> <li>• Disposal and treatment of waste;</li> <li>• Downstream transport: transport of the purchased product to the customer;</li> <li>• Purchase of capital goods;</li> <li>• Commuting;</li> <li>• Business travel;</li> <li>• End-of-life emissions of packaging materials;</li> <li>• Energy related upstream emissions</li> </ul>
Analysed period	31/12/2021 - 31/12/2022.

### 3. CO2 Matrix

The CO2 matrix for Gheys Transport & Logistics was created in cooperation with Encon. This matrix reveals which emission sources are present at the site(s) (Scope 1 & 2 emissions) and which significant processes and emission sources are present in the upstream and downstream of the organization's chain of Gheys Transport & Logistics (Scope 3 emissions).

### 4. CO2 FOOTPRINT GHEYS TRANSPORT & LOGISTICS 2022.

All calculations are in line with the GLEC framework. The Global Logistics Emissions Council (GLEC) was established in 2014 as a voluntary partnership and has grown to more than 50 companies, industry associations and green freight programs, backed by experts, governments and other stakeholders. Together, they develop and implement global guidelines to calculate, report and reduce logistics emissions that work for industry. It is important to recognize that the GLEC Framework is not a formal standard that provides one, and only one, prescriptive step-by-step approach to the calculation and reporting of logistics emissions. Instead, the Framework provides boundaries for the emissions to be reported, base methodologies that can be used (with or without adaptation), considerations for the reporting process, and guidance on how to deliver the best output from the information available.

#### OVERVIEW 2022.

The table below shows the consolidated CO2 footprint of Gheys Transport & Logistics for the year 2022. There can be seen that scope 1 has an impact of 98,25% while Scope 2 has an impact of 1,75% on the CO2 footprint of Gheys Transport & Logistics.

Scope	Tonnes CO2	% Scope 1+2
Scope 1	18.807,49	98,25%
Scope 2 – Market Based	335,69	1,75%
<b>Total</b>	<b>19.143,18</b>	<b>100%</b>

#### SCOPE 1

As already mentioned before, the scope 1 emissions comprise 98,25% of the total carbon footprint of Gheys Transport & Logistics, or 18.807,49 in tonnes CO2e.

Important to note with this figure is that refrigerant leakage was not included in the calculation since it was not possible to collect this data. Within Gheys Transport & Logistics's processes, there are no chemical reactions that cause direct process emissions so this category will not affect the carbon footprint of Gheys Transport & Logistics.

Scope	Tonnes CO2	% Scope 1	% Scope 1+2
Stationary Emissions	1.130,31	6,01%	5,90%
Moblie Emissions	17.677,17	93,99%	92,34%
Fugitive Emissions	<0.01	<0.01%	<0.01%
<b>Total</b>	<b>18.807,49</b>	<b>100%</b>	<b>98,25%</b>

## SCOPE 2

The Scope 2 emissions are specifically linked to the purchased electricity for the entire electricity consumption of the site(s). The table below shows the impact connected to all purchased electricity of Gheys Transport & Logistics. The company produces electricity with wind turbines at their site in Beringen, causing a part of their electricity consumption to have no impact. The impact mostly comes from the purchase of grey electricity at the offices and the other sites. The production of this grey electricity causes a CO<sub>2</sub>e emission of 335,69 tons of CO<sub>2</sub>e which has an impact of 1,75% on the total emissions.

Market Based	Consumption (kWh)	Tonnes CO <sub>2</sub>	% Scope 2	% Scope 1+2
Purchased Electricity	3.982.712,00	335,69	100%	1,75%
Own produced Electricity	2.008.689,00	0.00	0%	0,00%
<b>Total</b>	<b>5.991.401,00</b>	<b>335,69</b>	<b>100%</b>	<b>1,75%</b>

The above calculation was performed based on the market-based method, which uses supplier specific emission factors, and the power generation situation at the sites of Gheys Transport & Logistics. The market-based emission factor (0,14 kg CO<sub>2</sub>e/kWh) was provided by AIB project of Europe for the residual mix.

Following the GHG Protocol, Scope 2 emissions are also reported with another method, the location based method. The location-based method reflects the average emissions intensity of the grid on which energy consumption occurs depending on the country the company is located, and the year.

Location Based	Consumption (kWh)	Tonnes CO <sub>2</sub>	% Scope 2	% Scope 1+2
Purchased Electricity	3.982.712,00	489,87	100%	2,54%
Own produced Electricity	2.008.689,00	0.00	0%	0,00%
<b>Total</b>	<b>5.991.401,00</b>	<b>489,87</b>	<b>100%</b>	<b>2,54%</b>

## SCOPE 3

Scope 3 emissions are usually more complex to assess correctly than scope 1 and scope 2 emissions. The scope 3 emissions include all emissions in the up- and downstream of an organization's value chain. Of the 15 different scope 3 emission categories, 8 categories turned out to be relevant, these are discussed in detail in this chapter. It is estimated that more than 67% of the total scope 3 impact was included in the calculation. The table below gives an overview of the different subcategories under the scope 3 emission category.

Scope 3	Tonnes CO <sub>2</sub>	%
Category 01: Purchased materials and services	2.499,26	9,47%
Category 02: Capital goods	3.477,12	13,17%
Category 03: Fuel- and energy related activities, not included in scope 1 or 2	5.161,71	19,56%
Category 04: Upstream transport and distribution	14.587,16	55,27%
Category 05: Waste generated in operations	481,11	1,82%
Category 06: Business travel	2,11	0,01%
Category 07: Employee commuting	75,72	0,29%
Category 12: End of Life of packaging materials	110,61	0,42%
<b>Total</b>	<b>26.394,79</b>	<b>100%</b>

## 5. REPORTING ABOUT CO2

According to GLEC, emissions can be reported at two different levels.

- A total emissions value, which shows the scale of the overall impact, and
- An emission intensity value, which links the emission to the transport activity or amount of product shifted. In the case of Gheys Transport & Logistics, the emission intensity is calculated in terms of kg CO2e per € turnover.

Even when looking at the total emissions connected to all activities of Gheys Transport & Logistics, a specific layout that may be followed according to the GLEC framework is shown below:

CO2e-specific emission intensity connected to the total emissions of Gheys Transport & Logistics																		
Total emissions	45.537.970 kg CO2e																	
Emission intensity	0,485 kg CO2e/€ turnover																	
CO2e emissions by scope	<table border="1"> <thead> <tr> <th>Scope</th> <th>Tonnes CO2</th> <th>% Scope 1+2</th> </tr> </thead> <tbody> <tr> <td>Scope 1</td> <td>18.807,49</td> <td>98,25%</td> </tr> <tr> <td>Scope 2 – Market Based</td> <td>335,69</td> <td>1,75%</td> </tr> <tr> <td>Scope 3</td> <td>26.394,79</td> <td>57,96%</td> </tr> <tr> <td><b>Total</b></td> <td><b>45.537,97</b></td> <td><b>100%</b></td> </tr> </tbody> </table>			Scope	Tonnes CO2	% Scope 1+2	Scope 1	18.807,49	98,25%	Scope 2 – Market Based	335,69	1,75%	Scope 3	26.394,79	57,96%	<b>Total</b>	<b>45.537,97</b>	<b>100%</b>
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Input data types	Used data types: primary and secondary data.																	
Supply chain coverage	It is assumed that at least 67% of the Scope 3 emissions are included in the calculation. The table below shows all scope 3 categories and the degree of relevance for Gheys Transport & Logistics.																	
Data verification statement	All data has been independently verified by a third party via the program tool's processes.																	

## APPENDIX : EMISSIONS FACTORS

Scope 1	Emission Factor	Unit	Source
<b>Stationary Emissions</b>			
Natural Gas	0,202	Kg CO2e/kWh LHV	CO2emissiefactoren.be
Fuel Oil	2,680	Kg CO2e/litre	CO2emissiefactoren.be
Propane	1,600	Kg CO2e/litre	CO2emissiefactoren.be
<b>Mobile Emissions</b>			
Diesel	2,403	Kg CO2e/litre	CO2emissiefactoren.be
Gasoline	2,128	Kg CO2e/litre	CO2emissiefactoren.be
CNG	2,680	Kg CO2e/kg	CO2emissiefactoren.be

Scope 2	Emission Factor	Unit	Source
Grey electricity – location based	0,123	Kg CO2e/kWh	AIB
Grey electricity – market based	0,144	Kg CO2e/kWh	AIB