



# GreenHouse Gas (GHG) Emissions Report 2024

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## 1. Introduction

In this report, we detail Mexlog's Scope 1, Scope 2, and Scope 3 Greenhouse Gas (GHG) emissions. Mexlog is a leading Mexican company in the transportation industry. The company provides specialized logistics and transportation services for vehicle transfers—specifically trucks and automobiles—in a timely and reliable manner, supported by a highly specialized team committed to quality and continuous improvement. Its network of strategically located offices and terminals, along with the use of advanced technology, enables greater operational efficiency and allows the company to exceed the expectations of its internal and external clients, suppliers, and shareholders.

With 30 years of accumulated experience, Mexlog has shaped and perfected its processes to provide clients with the service, attention, and treatment they seek and deserve. Throughout its history, the company has transported 4.9 million vehicles, demonstrating its capacity and commitment to operational excellence.<sup>1</sup>

The carbon footprint measures the total amount of greenhouse gases emitted directly or indirectly by an organization or company. In this case, the importance of calculating Mexlog's GHG emissions lies in the need to understand and identify opportunities to reduce the carbon footprint, improve operational efficiency, and comply with current environmental regulations. Furthermore, the company's commitment to sustainability and transparency in the management of its emissions reinforces Mexlog's position as a reliable and responsible partner in the logistics and transportation value chain, especially in an industry like transportation, which is responsible for a significant share of global GHG emissions.

Through this report, Mexlog reaffirms its commitment to environmental sustainability and corporate responsibility by presenting a detailed analysis of its direct emissions (Scope 1); indirect emissions associated with purchased energy (Scope 2); and indirect emissions associated with downstream transportation and distribution (Scope 3). This analysis will contribute to global efforts to mitigate climate change and promote a more sustainable future.

## 2. General Description of the Inventory

### 2.1. Applicability

Mexlog's emissions inventory is used for greenhouse gas reporting purposes.

Internally, the carbon inventory is intended to identify and recognize major emission sources and, in line with this, to set the development of emission and intensity reduction commitments and to monitor Mexlog's climate performance in the future. In addition, the inventory serves as the basis for Mexlog's public disclosures.

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<sup>1</sup> Mexlog website, <https://mexlog.com/>

## 2.2. Definitions

- **Activity data:** Source data that quantifies an emission-generating activity, such as fuel use and electricity consumption, and can be used to determine greenhouse gas emissions.
- **Greenhouse gases (GHG):** Atmospheric gases responsible for climate change and identified under the Kyoto Protocol. In the second commitment period (2012–2020), seven gases were identified: carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulfur hexafluoride (SF<sub>6</sub>); and nitrogen trifluoride (NF<sub>3</sub>).
- **Carbon inventory:** A detailed accounting of greenhouse gas emissions attributable to activities within a defined organizational boundary.
- **Direct emissions (Scope 1):** Direct emissions occur from sources owned or controlled by the company. For example, emissions from combustion in boilers, furnaces, vehicles, etc., that are owned or controlled by the company; emissions from chemical production in owned or controlled process equipment.
- **Indirect emissions (Scope 2):** Scope 2 includes emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity bought or brought into the company's organizational boundary.
- **Indirect emissions (Scope 3):** Scope 3 is an optional reporting category that allows for the inclusion of all other indirect emissions. Scope 3 emissions are a consequence of the company's activities, but occur at sources not owned or controlled by the company. Examples include extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services.
- **Organizational boundary:** The entities and activities that an organization includes in its carbon inventory.
- **Operational boundary:** The emission sources that an organization includes in its carbon inventory.
- **Operational control:** The highest authority within a corporate group to introduce or implement any or all of the following for an activity or facility: (i) operational policies; (ii) health and safety policies; (iii) environmental policies. Only one entity may have operational control of an activity or facility at any given time.
- **Reporting year:** The period covered by the carbon inventory.
- **Emission factor:** A representative value that attempts to relate the quantity of a pollutant released into the atmosphere with an associated emission-generating activity.
- **Global warming potential:** A factor that describes the radiative forcing impact (degree of harm to the atmosphere) of a unit of a given GHG relative to a unit of CO<sub>2</sub>. It assigns a value to the amount of heat trapped by a mass of gas compared to the heat trapped by an equivalent mass of carbon dioxide over a specific time period.

### 2.3. Reporting period covered

This Greenhouse Gas (GHG) inventory, which corresponds to the base year, covers January 1, 2024 through December 31, 2024. Therefore, the activity data needed for the calculation is collected for the 2024 reporting period.

### 2.4. Carbon accounting framework

To align with best practices in carbon accounting, Mexlog’s GHG emissions calculation has been developed in accordance with a robust carbon accounting framework. This is important to provide confidence to Mexlog’s stakeholders and to ensure no double counting of emissions, while promoting consistency and comparability over time.

The GHG Protocol methodology—which establishes how to measure and report greenhouse gas emissions—was considered for this exercise. The methodology considers available activity data (consumption, generation, and use by source), emission factors, and global warming potential, which allow for consistent and reproducible results.

Aspect	Approach adopted by Mexlog
Carbon accounting standard	GHG Protocol Corporate Accounting Standard
Determination of organizational boundary	<b>Operational control approach</b> , as defined by the GHG Protocol Corporate Accounting Standard
Operational boundaries	<u>GHG Protocol Corporate Accounting Standard</u>
Emission factors	Country-specific emission factors for fuel origin (when available); Mexico-specific emission factors; IPCC Guidelines for National Greenhouse Gas Inventories.

Table 1 – Mexlog’s Carbon Accounting Framework for Its Operations

### GHG Protocol

This international framework establishes standards, tools, and guidance to measure and manage greenhouse gas emissions, allowing organizations to understand both direct and indirect emissions.

Under the GHG Protocol, greenhouse gas emissions are classified into three scopes as follows:

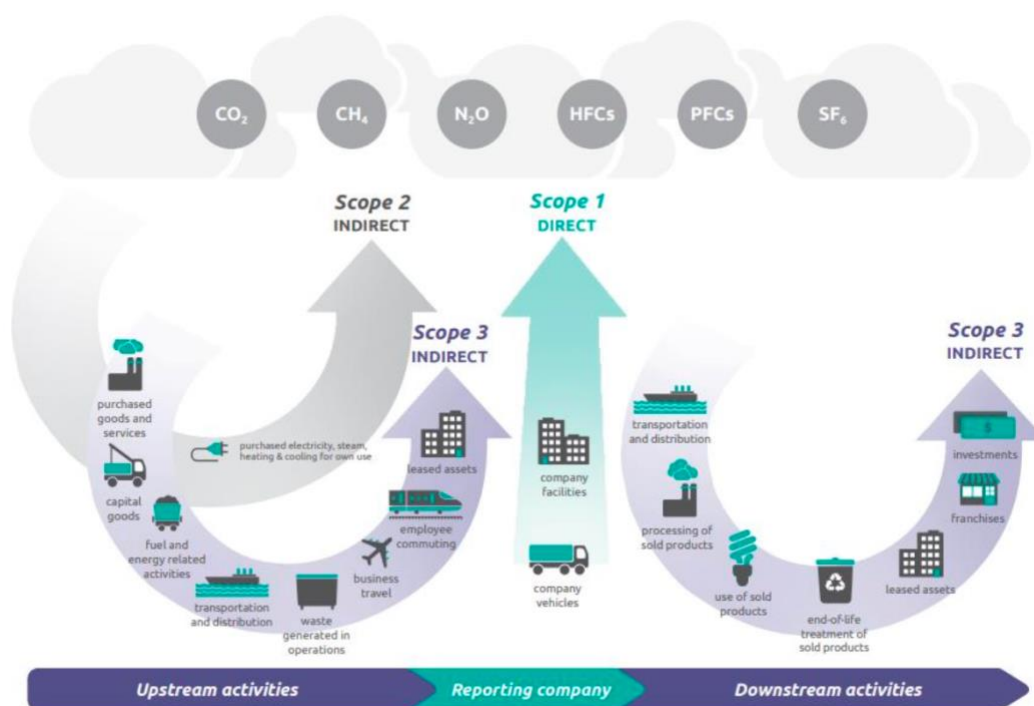


Figure 1 – GHG Protocol Methodology. Scope 1, 2, and 3.

Reference: ((World Business Council for Sustainable Development, World Resources Institute & Secretaría de Medio Ambiente y Recursos Naturales, 2005)

- **Scope 1 – Direct GHG emissions:** Emissions generated directly from sources owned or controlled by the company (Deloitte, 2024).
- **Scope 2 – Indirect GHG emissions:** Companies report as Scope 2 the emissions from the generation of purchased electricity consumed in their operations or owned/controlled equipment. These indirect emissions from purchased electricity, heat, steam, and cooling are often among the most significant sources of emissions for many companies. Accounting for Scope 2 emissions enables companies to assess risks and opportunities associated with changing electricity and GHG emissions costs (Deloitte, 2024).
- **Scope 3 – Other indirect GHG emissions:** Scope 3 includes all other indirect emissions that are a consequence of the company's activities but occur from sources not owned or controlled by the company. There are 15 reportable Scope 3 categories (GHG Protocol, 2025).

## 2.5. Inventory boundaries

The emissions inventory boundary defines what must be included and excluded from the inventory. It consists of:

- **Organizational boundary** – the entities, operations, and activities to be included.

- **Operational boundary** – the emission sources to be included.

Boundary selection depends on the company's characteristics, the intended purpose of the information, and the needs of the inventory's users/audience.

### 2.5.1. Organizational boundary

As shown in Table 1, the operational control approach was selected as the most appropriate for Mexlog to establish its organizational boundary.

For the quantification of GHG emissions, the main locations where GHG-emitting sources are recorded were considered, specifically those directly under Mexlog's control and administration. The organizational boundary includes yards located in Mexico and the United States. This boundary was defined by the company. Below is a graphic representation of the locations of Mexlog's yards.

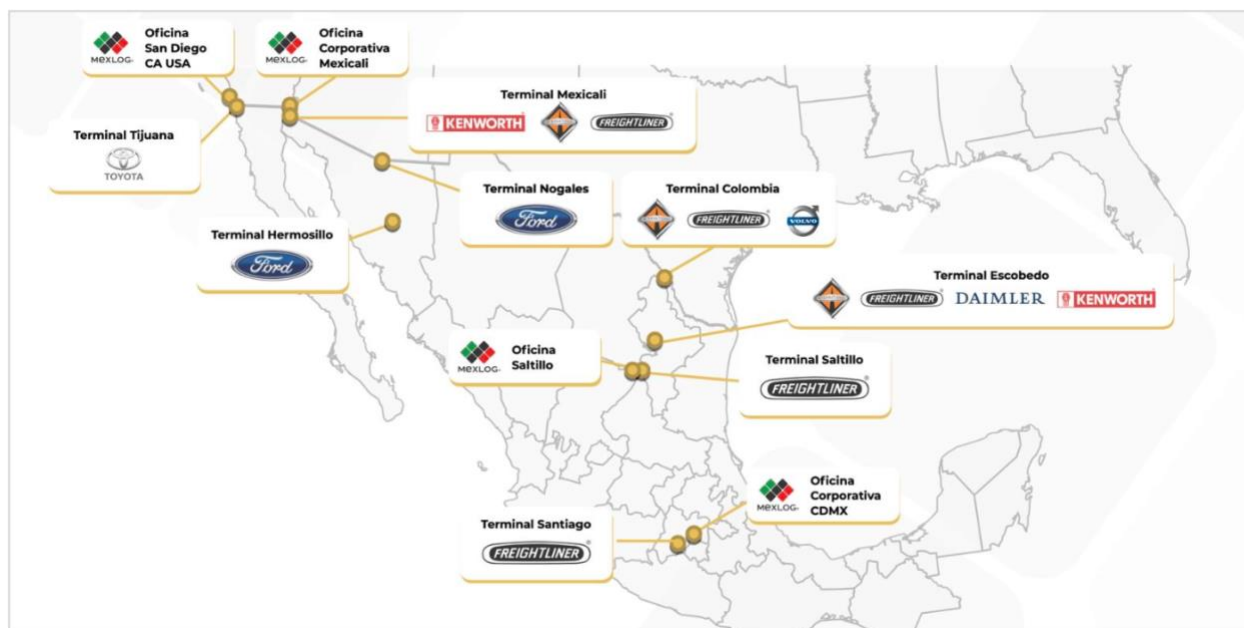


Figure 2 – Mexlog yards (Mexlog, 2025)

### 2.5.2. Operational boundaries

Defining the operational boundary means deciding which emission sources are included or excluded. Emission sources and activities occurring within Mexlog's boundaries must be examined for possible inclusion.

In line with the methodology used—based on the GHG Protocol—a control approach was applied. Under this approach, a company accounts for 100% of GHG emissions attributable to operations over which it exercises operational control, meaning the company has full authority to introduce and implement its operational policies in the operation.

Scope	Source	Item	Fuel Used	GHGs Reported
Scope 1	Fixed sources (owned)	N/A	N/A	N/A
	Mobile sources (owned)	Vehicles (cars, vans, trucks)	Diesel	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub> e
		Vehicles (cars, vans, trucks)	Gasoline	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub> e
	Refrigerants – fixed sources	Air conditioning refrigerants	R-22	HFC, CO <sub>2</sub> e
		Air conditioning refrigerants	R-404A	HFC, CO <sub>2</sub> e
	Fire extinguishers	Extinguisher use (CO <sub>2</sub> /BC–ABC–AFFF–HCFC)	CO <sub>2</sub>	CO <sub>2</sub> , CO <sub>2</sub> e
Scope 2	Electricity consumption	Electricity from the grid (Administrative and Operational)	N/A	CO <sub>2</sub> e
Scope 3	Cat. 9 (Downstream transportation & distribution)	Customer vehicle transport	Diesel	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub> e
			Gasoline	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, CO <sub>2</sub> e

Table 2 - Corporate GHG Emissions Inventory Boundaries for Mexlog

According to the table above, fixed sources are not applicable because no fuel consumption was identified for stationary sources at Mexlog; thus, company-owned or controlled operations do not generate GHG emissions in this category. Regarding Scope 3 emissions, it is important to clarify that no significance assessment was conducted per the GHG Protocol methodology. The calculated and included emissions correspond to Category 9: downstream transportation and distribution, specifically the delivery of vehicles to customers. These emissions were included because exact fuel consumption data is available and, due to the magnitude of the emissions, they are assumed to be a significant category.



### 3. General Results

#### 3.1. Emissions trend

Mexlog emitted a total of 14,668.52 tons of carbon dioxide equivalent (CO<sub>2</sub>eq) during 2024, considering the sum of scopes 1 and 2, of which 98% corresponds to direct sources. There is an increase of more than 100% in 2024 compared to 2023. The main variation was identified in scope 1 emissions, mainly due to the increase in diesel fuel consumption, which generated a significant rise in scope 1 emissions—5,713 tCO<sub>2</sub>eq in 2023 and 14,377 tCO<sub>2</sub>eq in 2024. This increase is mainly associated with a higher number of dispatches s for car-hauls and trucks, driven by customer needs. Specifically, at the Nogales yard, a new car-haul operation for automobile crossings was launched.

Below are the details of emissions by scope.

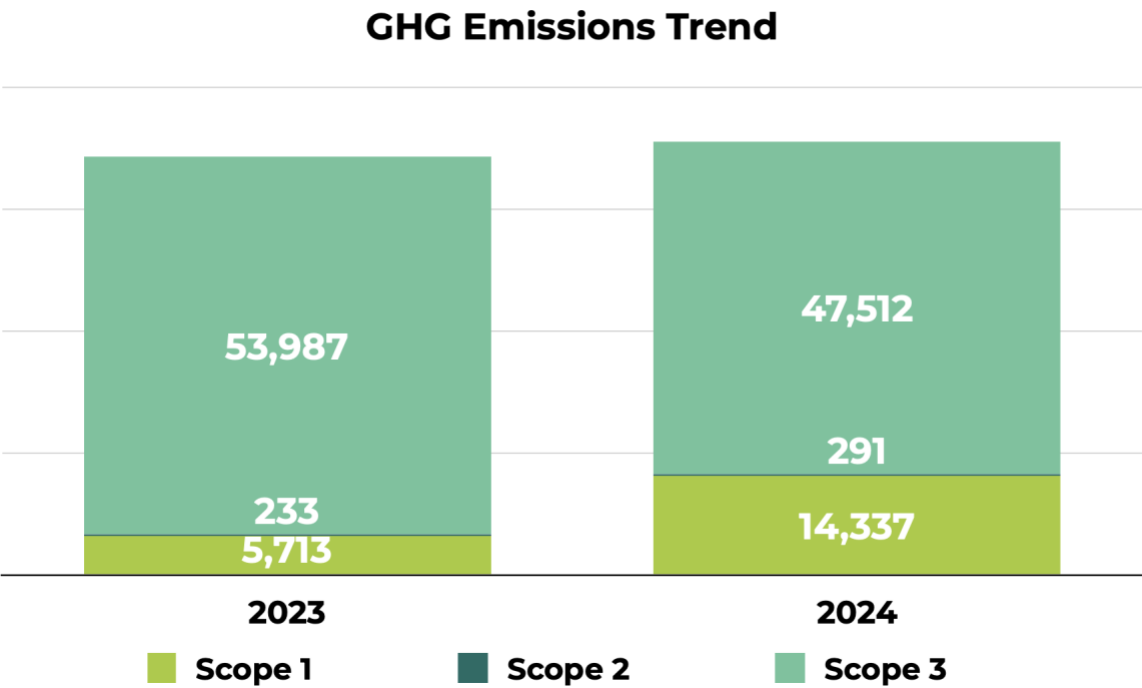


Figure 3 – Historic GHG Emissions 2023- 2024

Fuel	2023 Consumption	2024 Consumption	Percentage change vs previous year
Gasoline (L)	109,834	71,995	-34%
Diesel (L)	1,991,604	4,454,351	124%

Table 3 - Variation in fuel consumption compared to the previous year.

#### 3.2. 2024 Emissions results

The specific GHG emissions results for scopes 1 and 2 in 2024 correspond mainly to mobile sources, representing 84% of total emissions, followed by 14% from refrigerant use in cooling systems, and

to a lesser extent, electricity consumption and emissions from the use or recharge of fire extinguishers.

Category	Sources	Total GHG Emissions (t CO <sub>2</sub> eq/year)	Contribution (%)
Scope 1	Mobile sources	12,391.41	84%
	Refrigerants	1,986.49	14%
	Fire extinguishers	0.07	0%
	<b>Total</b>	<b>14,377.98</b>	<b>98%</b>
Scope 2	Purchased electricity	290.55	2%
<b>Carbon footprint scopes 1 &amp; 2</b>		<b>14,668.52</b>	<b>100%</b>
Scope 3	Downstream transportation & distribution	47,512	-
<b>Mexlog's total carbon footprint scopes 1, 2 &amp; 3</b>		<b>62,180.99</b>	<b>-</b>

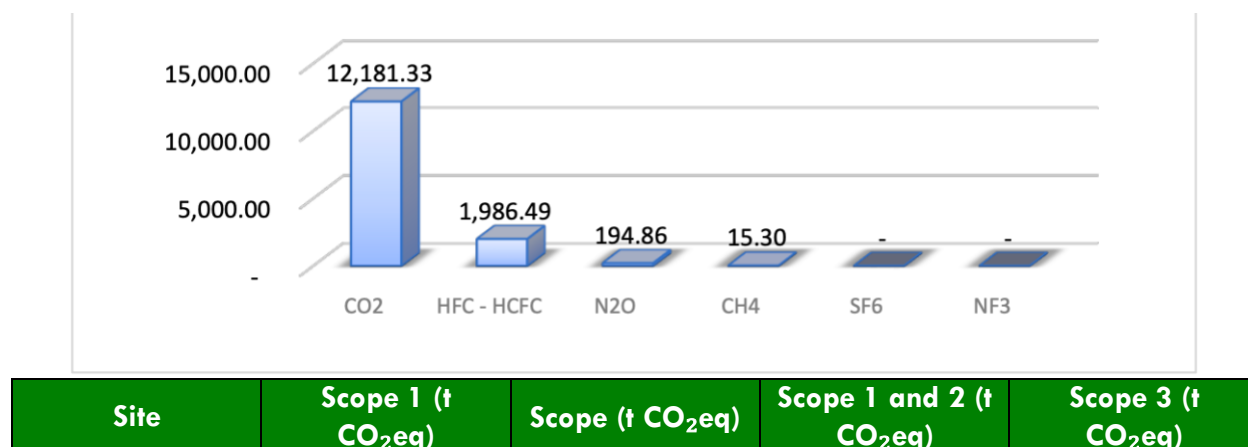
Table 4. Greenhouse Gas (GHG) Emissions Results for Mexlog by Scope.

It is evident that the most released Greenhouse Gas is carbon dioxide (CO<sub>2</sub>), primarily because it is generated from fuel combustion in mobile sources. This is followed by fluorinated compounds from refrigerant use. A smaller proportion corresponds to methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) from fuel use in mobile sources. No SF<sub>6</sub> or NF<sub>3</sub> emissions sources were identified in this inventory.

### Emissions by GHG Type (t CO<sub>2</sub>eq) – Scopes 1 and 2

Figure 4 - GHG Emissions by Type 2024

According to the requirements of the GHG Protocol methodology, emissions controlled by the organization— that is, Scope 1 and 2 —are presented separately. In 2024, 84% of emissions correspond to fuel consumption in mobile sources, while 16% resulted from the consumption and use of refrigerants and electricity. Based on these results, the sites were grouped according to their contribution to total Scope 1 and 2 emissions. The results are presented in Table 5, which shows that the Nogales Terminal accounts for 55% of total GHG emissions, followed by the Tijuana Terminal with 20%, and the Mexicali Terminal with 10%. The remaining sites make up the remaining 16% of GHG emissions.



Nogales Yard	8,068.62	7.93	<b>8,076.55</b>	-
Tijuana Yard	2,867.73	-	<b>2,867.73</b>	-
Mexicali Yard	1,318.57	126.92	<b>1,445.49</b>	12,680.54
Corporate	601.51	66.71	<b>668.22</b>	-
Escobedo Yard	511.85	-	<b>511.85</b>	1,213.81
Recolectores	449.90	-	<b>449.90</b>	-
Saltillo yard	200.56	-	<b>200.56</b>	9,775.04
Laredo Yard	196.37	-	<b>196.37</b>	1,196.68
Colombia Yard	31.90	66.44	<b>98.34</b>	-
Tecate Yard	64.27	19.10	<b>83.37</b>	-
Santiago Yard	61.76	-	<b>61.76</b>	15,239.06
Operacion Nacional	4.92	-	<b>4.92</b>	6,721.86
Tlanepantla	-	7.43	<b>7.43</b>	-
PDN Yard	0.03	-	<b>0.03</b>	-
Cascadias	-	-	<b>-</b>	685.48
	<b>14,377.97</b>	<b>294.53</b>	<b>14,672.50</b>	<b>47,512.47</b>

Table 5. Results of Greenhouse Gas Emissions (GHG) by site.

From the table above, it is evident that only six sites reported energy consumption during 2024, with the Corporate office and the Colombia Terminal contributing most significantly to Scope 2 emissions.

## 4. Estimation of emissions by scope

It is important for the data used in the Greenhouse Gas (GHG) emissions inventory to be as accurate as possible. Low-quality data may lead to misrepresentation and increase exposure to external criticism; therefore, the information should come from the most reliable sources available. The following section describes the calculation process used for Mexlog, the emission sources and data that support the calculations, as well as a summary of emissions generated at each site for each type of fuel.

### 4.1. Scope 1

#### 4.1.1. Mobile sources

For the calculation of emissions from mobile sources, Mexlog considered owned vehicles such as trucks, vans, and other units using gasoline or diesel.

The emission factors and calorific values used were taken from each country's national inventory or publicly available government information. The applied formula, taken from the same sources, is as follows:

$$GHG\ Emissions = Fuel\ Consumption \times EF\ (Fuel\ Emission\ Factor)$$

Where:

**Fuel consumption** = amount of fuel consumed (L or m<sup>3</sup>)

**EF (Emission Factor)** = emission factor (t/MJ)

In all cases, fuel consumption units were converted as necessary so they could be multiplied by the corresponding emission factor. The emission factors were sourced from publicly available government data or the IPCC. In this case, factors published by the U.S. Environmental Protection Agency (EPA) and the 2017 GHG Protocol Emission Factors tool were used. U.S. emission factors were applied because the fuel consumed is sourced from the United States.

Default Emission Factors – Ground Transportation			
Fuel	CO <sub>2</sub> (t GHG/L)	CH <sub>4</sub> (t GHG/L)	N <sub>2</sub> O (t GHG/L)
Gasoline	0.002319	0.0000007	0.0000004
Diesel	0.002697	0.0000001	0.0000002

Table 6. Emission factors considered by the EPA. (GHG Protocol, 2017). (EPA, 2023)

The result (emissions of each GHG) is multiplied by the Global Warming Potential (GWP) for carbon dioxide, methane, and nitrous oxide, producing the tons of CO<sub>2</sub>-eq.

Global Warming Potential (GWP)	
Carbon dioxide CO <sub>2</sub>	1
Methane CH <sub>4</sub>	28
Nitrous oxide N <sub>2</sub> O	265

Table 7. Global warming potentials considered for the GHG inventory.

Site	Fuel	Unit	Total Consumption	Total CO <sub>2</sub> eq
Mexicali Yard	Diesel	L	215,609	591.27
Nogales Yard	Diesel	L	2,151,416	5,889.85
	Diesel	L	4,335	11.89
	Gasoline	L	7,594	18.59
Saltillo Yard	Diesel	L	63,157	173.20
	Gasoline	L	11,179	27.36
Escobedo Yard	Diesel	L	47,376	129.92
	Gasoline	L	22,822	55.86
Santiago Yard	Diesel	L	15,930	43.68
	Gasoline	L	7,385	18.07
Laredo Yard	Diesel	L	57,861	158.67
	Gasoline	L	15,401	37.69
Cascadias	Diesel	L	-	-
	Gasoline	L	-	-
Operacion Nacional	Diesel	L	43	0.12
	Gasoline	L	1,960	4.80
Tijuana Yard	Diesel	L	269,068	737.87
	Gasoline	L	5,655	13.84
Corporate	Gasoline	L	-	-
	Gasoline	L	-	-
	Diesel	L	-	-
Recolectores	Diesel	L	164,058	449.90
Nogales Yard / USA	Diesel	L	693,878	1,902.83
Tijuana Yard / USA	Diesel	L	771,620	2,116.02

Table 8. Total emissions from mobile sources by site.

Fuel Consumption – Total mobile sources	Emissions CO <sub>2</sub> (t CO <sub>2</sub> eq/year)	Emissions CH <sub>4</sub> (t CO <sub>2</sub> eq/year)	Emissions N <sub>2</sub> O (t CO <sub>2</sub> eq/year)	Total t CO <sub>2</sub> eq
Gasoline	166.99	1.46	7.76	176.21
Diesel	12,014.27	13.84	187.10	12,215.20
<b>TOTAL</b>	<b>12,181.26</b>	<b>15.30</b>	<b>194.86</b>	<b>12,391.41</b>

Table 9. Total emissions from mobile sources by fuel type.

As a result, total emissions of 12,391.41 t CO<sub>2</sub>eq are attributed to the company's mobile sources, most of which correspond to diesel consumption.

### 3.1.2. Refrigerants

For this category, data reported by suppliers regarding refrigerant recharge and equipment maintenance were consolidated. The calculation considers the Global Warming Potential (GWP) of each refrigerant, provided by the IPCC.

The formula used, taken from [IPCC Chapter 7 \(Industrial Processes and Product Use – Refrigeration and Air Conditioning\)](#), is:

$$GHG\ Emissions = Amount\ of\ Refrigerant \times GWP$$

GWP values come from the [IPCC Sixth Assessment Report, Chapter 7](#).

Global Warming Potential		
Refrigerants Used	GWP-100 YEARS [1]	Refrigerant type
R-22	1760	HCFC
R-404A	3,942.8	HFC

Table 10. Global warming potentials for refrigerants used. (semarnat, 2015)

Next, we show the consolidated results for refrigerant use emissions:

Site	Refrigerants	Unit	Amount	Total t CO <sub>2</sub> eq
Tecate	R-404A	Kg	16.3	64.27
Nogales	R-404A	Kg	59.72	235.46
Mexicali	R-22	Kg	39.88	727.30
	R-404A	Kg	166.66	
Escobedo	R-22	Kg	14.52	326.08
	R-404A	Kg	76.22	
Colombia	R-22	Kg	18.12	31.89
	R-404A	Kg	0	
Corporativo	R-22	Kg	97.98	601.5
	R-404A	Kg	108.82	

Table 11. Total emissions from refrigerant use.

Total emissions from refrigerants amount to 1,986 t CO<sub>2</sub>eq, mostly from R-404A consumption.

### 3.1.3. Fire Extinguishers

For this category, data from providers related to extinguisher recharge were consolidated. Mexlog uses different types of extinguishers depending on the site; only CO<sub>2</sub> extinguishers generate GHG emissions due to their global warming potential.

The formula used for the calculation was taken from [Formula \(IPCC Chapter 7 – Fire Protection Products\)](#):

$$GHG\ Emissions = Extinguisher\ Charge \times GWP$$

Where:

**Extinguisher charge** = amount of extinguishing agent charged (kg)

**GWP** = 100-year Global Warming Potential

The GWP values for each extinguisher agent were taken from the [IPCC Sixth Assessment Report — Chapter 7 “The Earth’s Energy Budget, Climate Feedbacks and Climate Sensitivity.”](#)

Global Warming Potential		
Extinguisher type	Substance	GWP-100 years [1]
Carbon dioxide	CO <sub>2</sub>	1
Note: Dry chemical powder (PQS) agents and aqueous film-forming foams (AFFF) do not produce GHG emissions, so their global warming potential is assigned a value of 0.		

Table 12. Global warming potential by extinguisher agent used.

Below are the consolidated results for emissions from extinguisher use:

Extinguishers	Unit	Consumption	Total t CO <sub>2</sub> eq
Hermosillo	Kg	4.50	0.00
Nogales	Kg	9.00	0.01
Corporate	Kg	9.00	0.01
Mexicali	Kg	4.50	0.00
Saltillo	Kg	4.50	0.00
Santiago	Kg	0.00	-
PDN	Kg	27.00	0.03
Colombia	Kg	13.50	0.01

Table 13. Total emissions from extinguisher use.

As a result, total emissions of 0.07 t CO<sub>2</sub>eq were recorded for the use or recharging of the company’s extinguishers.

## 4.2. Scope 2

### 4.2.1. Purchased electricity consumption (grid)

For the calculation of this category, electricity purchase invoices from the sites were collected, which detail consumption in MWh. Country-specific grid emission factors were obtained from publicly available sources on the web.

The formula used for the calculation is expressed as:

$$GHG\ Emissions = Electricity\ consumed \times EF\ (emission\ factor)$$

Where:

**Electricity consumed** = electric energy consumed (MWh)

**EF (electricity emission factor)** = emission factor (t CO<sub>2</sub>eq/MWh)

Electricity emission factor - Mexico

0.438	† CO <sub>2</sub> e / MWh.
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Table 14. Emission factor for electricity use in Mexico. (SEMARNAT, 2024)

Below are the results disaggregated by emission source (site) and the total emissions (numbers indicate tons of CO<sub>2</sub> equivalent):

Site	Unit	Consumption (MWh)	Total † CO <sub>2</sub> e
Tecate	MWh	43.02	18.84
Colombia	MWh	149.64	65.54
Nogales	MWh	17.86	7.82
Tlanepantla	MWh	16.73	7.33
Mexicali	MWh	285.86	125.21
Corporate	MWh	150.24	65.81

Table 15. Emissions generated by electricity use per site.

As a result, total emissions of 290.55 † CO<sub>2</sub>eq were attributed to electricity purchased from the grid.

### 4.3. Scope 3

#### 4.3.1. Category 9 (Downstream transportation and distribution)

Within the methodological framework of the GHG Protocol Corporate Standard, Scope 3 emissions comprise those indirect emissions that occur in the company's value chain and are not reported under Scopes 1 or 2. For Mexlog, a significant portion of activities is related to the logistics and transportation of vehicles owned by end customers. It is important to clarify that Mexlog does not have operational control over these vehicles.

According to the GHG Protocol, these emissions are classified under Scope 3 in the category "Downstream Transportation and Distribution." In this modality, Mexlog supplies drivers who operate client-owned vehicles to deliver their final products. Although the vehicles are not owned by Mexlog, the service provided is an integral part of the value chain and contributes directly to commercial activity. For this reason, the emissions generated during this operation are an indirect consequence of the business and are included in the GHG inventory under this category.

Emission factors and calorific values were sought country-by-country within each national inventory or publicly available government sources. The formula used for the calculation is the same:

$$GHG\ Emissions = Fuel\ consumption \times EF\ (fuel\ emission\ factor)$$

Where:

**Fuel consumption** = quantity of fuel consumed (L or m<sup>3</sup>)

**EF (fuel emission factor)** = †/MJ



The emission factors used correspond to those published by the U.S. Environmental Protection Agency (EPA) and by the GHG Protocol in its 2017 Emission Factors tool. U.S. emission factors were used because the fuel consumed and procured is produced in that country.

Default emission factors — Ground transportation			
Fuel	CO <sub>2</sub> (t GHG / L)	CH <sub>4</sub> (t GHG / L)	N <sub>2</sub> O (t GHG / L)
Gasoline	0.002319	0.0000007	0.0000004
Diesel	0.002697	0.0000001	0.0000002

Table 16. Emission factors considered by the EPA. (GHG Protocol, 2017; EPA, 2023)

Below are the results by fuel type. The results indicate total emissions of 47,512.47 t CO<sub>2</sub>eq, most of which are attributable to diesel consumption.

Fuel	CO <sub>2</sub> (t CO <sub>2</sub> eq/year)	CH <sub>4</sub> (t CO <sub>2</sub> eq/year)	N <sub>2</sub> O (t CO <sub>2</sub> eq/year)	Total t CO <sub>2</sub> eq
Gasoline	10.16	0.09	0.47	10.72
Diesel	46,720.36	53.81	727.57	47,501.75
<b>TOTAL</b>	<b>46,730.52</b>	<b>53.90</b>	<b>728.05</b>	<b>47,512.47</b>

Table 17. Emissions for downstream transportation and distribution, by fuel type (Scope 3)

## 5. Conclusions

- According to the calculations performed, the categories with the largest contribution to the 2024 carbon footprint are **mobile sources**, followed by **refrigerants**. Therefore, these are the categories where Mexlog should focus efforts to reduce emissions, which can be mitigated through various initiatives.
- Mexlog is at an **initial level of ESG information management**, which reveals a significant opportunity to optimize internal processes for recording, controlling, and supervising the information used to build the corporate emissions inventory. In this regard, incorporation of an information management software that can be used collaboratively across sites is recommended.
- It is recommended to begin **measuring Mexlog's emissions monthly**, minimizing the use of estimates or assumptions. Based on monthly calculations, the company can establish trends and future emissions-reduction plans according to emissions generated by each source and scope.
- An estimate was performed for Category 9 **“Downstream Transportation and Distribution”** of Scope 3 under the GHG Protocol methodology, considering the magnitude of emissions and the available fuel-consumption information.
- It is recommended to start managing the measurement of additional Scope 3 categories (other indirect emissions established by the GHG Protocol). To carry out this estimation, a **significance assessment** is recommended to determine which additional categories should be calculated — for example: purchased goods and services; transport of purchased goods and services; treatment and disposal of waste; business air travel; and employee commuting from home to company sites.

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