



KATMERCİLER ARAÇ ÜSTÜ EKİPMAN
SAN. VE TİC. A.Ş.

CORPORATE GREENHOUSE GAS INVENTORY REPORT

-Prepared in accordance with the GHG Protocol
Corporate Standard-

01 JANUARY 2025 - 31 DECEMBER 2025

PREPARED BY:



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1. INTRODUCTION

As part of the fight against climate change, the measurement, management, and transparent reporting of greenhouse gas emissions are becoming increasingly important for organizations. Corporate greenhouse gas inventories are among the fundamental tools for monitoring sustainability performance, assessing climate-related risks, and meeting stakeholder expectations.

The Greenhouse Gas Protocol (GHG Protocol), developed through a collaboration between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), is one of the most widely recognized international standards for greenhouse gas accounting and reporting. The GHG Protocol provides a methodological framework for classifying and reporting organizational greenhouse gas emissions within organizational and operational boundaries as Scope 1 (direct emissions), Scope 2 (energy indirect emissions), and Scope 3 (other indirect emissions).

This Corporate Greenhouse Gas Inventory Report has been prepared based on the GHG Protocol: A Corporate Accounting and Reporting Standard (2024) for the quantification and reporting of greenhouse gas emissions arising from the organization's activities.

1.1. Organization Information

Company Name	KATMERCİLER ARAÇ ÜSTÜ EKİPMAN SAN. VE TİC. A.Ş
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Report Date	20.05.2026
Report Revision No	01
Reporting Year	2025
Base Year	2024

1.2. Definitions

- **Greenhouse Gas:** The Earth, atmosphere, and clouds absorb and emit infrared radiation at specific wavelengths within the infrared radiation spectrum range, which is a natural and anthropogenic gas component of the atmosphere.
Note – Greenhouse gases consist of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).
- **Greenhouse Gas Sources:** A physical unit or process that emits greenhouse gases into the atmosphere.
- **Greenhouse Gas Sinks:** A physical unit or process that removes any greenhouse gas from the atmosphere.
- **Greenhouse Gas Emissions:** The total mass of a particular greenhouse gas released into the atmosphere within a specific period of time.
- **Carbon Footprint:** It is a term used to describe the amount of greenhouse gases emitted into the atmosphere as a result of a process's production, transportation, heating, energy consumption, or any raw materials it purchases and any products it produces, expressed as carbon dioxide equivalents.
- **Greenhouse Gas Removals:** The total mass of one of the greenhouse gases removed from the atmosphere within a specific period.
- **Greenhouse Gas Emissions and Removals Factor:** A factor related to activity data for greenhouse gas emissions or removals.
- **Greenhouse Gas Activity Data:** The quantitative measure of an activity that results in greenhouse gas emissions or removals.
- **Greenhouse Gas Inventory:** Information regarding a company's greenhouse gas sources, greenhouse gas sinks, greenhouse gas emissions, and greenhouse gas removals.
- **Global Warming Potential (GWP):** The factor defining the radiative forcing effect of a specific greenhouse gas, based on its mass equivalent in carbon dioxide, over a specific time period.
- **Carbon Dioxide Equivalent CO₂e:** A unit used to compare the radiative forcing of a greenhouse gas with that of carbon dioxide.
- **Base Year:** A period in the past that is defined for the purpose of comparing greenhouse gas emissions or removals or other greenhouse gas-related information in the future.
- **Organization:** A company, firm, entrepreneur, institution, or establishment that owns and manages its own business, whether joint or not, public or private, or any part or whole thereof.
- **Responsible Party:** The person or persons responsible for submitting the greenhouse gas declaration and providing greenhouse gas information.
- **Target User:** A person or organization defined by those reporting greenhouse gas information and relying on this information for decision-making.
- **Confidence Level:** The level of assurance requested by the target user in authentication or verification.
- **Monitoring:** Continuous or periodic assessment of greenhouse gas emissions and removals or other greenhouse gas data.
- **Uncertainty:** A parameter related to the specified amount and showing the distribution of values in the calculation result.

1.3. Acronyms

CH₄ Methane

CO₂ Carbon dioxide

CO₂e Carbon dioxide Equivalent

EF Emission Factor

GHG Greenhouse Gas

GHG Protocol GHG Protocol: A Corporate Accounting and Reporting Standard (2024)

GWP Global Warming Potential

HFCs Hydro Fluoro Carbons

IPCC Intergovernmental Panel on Climate Change

N₂O Nitrous Oxide

PFCs Per Fluoro Carbons

SF₆ Sulfur Hexafluoride

1.4. Approach for Combining Emissions and Removals

The organization is responsible for all calculated greenhouse gas emissions and/or removals from facilities under its financial and administrative control. Therefore, the organizational boundaries for the consolidation of greenhouse gas emissions and removals have been established based on the Operational Control Approach in accordance with the GHG Protocol Corporate Accounting and Reporting Standard.

There are no legal obligations that the organization must comply with in terms of greenhouse gas legislation.

Any changes made to the selected aggregation method will be declared in the following year's greenhouse gas report.

1.5. Objective and Scope

This Corporate Greenhouse Gas Inventory Report ("Report") has been prepared to quantify greenhouse gas emissions arising from the organization's activities within organizational and operational boundaries and to report them in accordance with the GHG Protocol: A Corporate Accounting and Reporting Standard (2024).

The Greenhouse Gas Report includes both direct and indirect emissions. The calculations cover Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Nitrogen Trifluoride (NF₃), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur Hexafluoride (SF₆).

1.6. Policy and Strategies

- Minimizing potential environmental damage by controlling activities that may contribute to greenhouse gas formation,
- Reducing greenhouse gas emissions by ensuring the efficient use of greenhouse gas sources,
- Ensuring and improving energy management in all activities,
- To make a positive contribution to preventing climate change by reducing greenhouse gas emissions within the framework of global climate policies, international agreements, and national and international commitments,
- To reduce the energy and natural resource consumption of employees, suppliers, and contractors through training as part of continuous improvement.

1.7. Intended User

The prepared Corporate Greenhouse Gas Inventory Report targets the following users:

- Senior Management,
- Employees,
- Customers,
- Suppliers,
- Other stakeholders.

1.8. Target Audience for the Report

The prepared Report will be published on the organization's website and in the Sustainability Report for target users.

Additionally,

- Upon request from official institutions;
- Upon data request under the Global Compact

it will be communicated to the requesting institutions.

1.9. Reporting Standard and References

The Corporate Greenhouse Gas Inventory Report has been prepared in accordance with the GHG Protocol: A Corporate Accounting and Reporting Standard (2024).

1.10 GHG Reporting Principles

Relevance: The Corporate Greenhouse Gas Inventory has been prepared to accurately reflect the significant greenhouse gas emissions arising from the organization's activities. Organizational and operational boundaries were determined considering organizational activities, operational control structure, and stakeholder information needs.

Completeness: All significant greenhouse gas emission sources within the defined organizational and operational boundaries have been included in the inventory. Sources excluded due to data limitations or methodological constraints have been clearly identified and justified.

Consistency: Consistent calculation methodologies, emission factors, and reporting approaches have been used to ensure comparability of greenhouse gas emissions over time. Any changes in methodologies or boundary definitions are disclosed in the report.

Transparency: Activity data, assumptions, emission factors, data sources, and calculation methodologies used in the greenhouse gas inventory have been presented transparently. The inventory has been prepared to ensure traceability, verifiability, and understandability.

Accuracy: Reliable data sources and internationally recognized calculation methodologies have been used to quantify greenhouse gas emissions as accurately as possible. Necessary controls have been implemented to reduce uncertainties and improve data quality.

1.11. Collection of Activity Data and Greenhouse Gas Quality Management

The activity data used in greenhouse gas accounting is collected and controlled in accordance with the Quality Management System processes implemented within the organization. Katmerciler is responsible for collecting the activity data included in the inventory and for the accuracy of the data.

2. GENERAL

2.1. Reporting Organization

Katmerciler A.Ş. was established in Izmir in 1985 and operates in the vehicle equipment manufacturing and defense industries.

Since its establishment, the company has developed its product range over time, reaching its current level and becoming one of the important representatives of the sector with a wide range of vehicle-mounted equipment and a high level of technical knowledge. Katmerciler Inc., which has continuously improved its quality level with the Quality Management System established in 1997, began its overseas sales in 1998, starting with Japan. Today, it has a wide export network stretching from Asia to Europe and from Africa to the Middle East, and a significant portion of the company's sales currently consists of export revenues.

The product range in the vehicle-mounted equipment sector includes firefighting vehicles, environmental vehicles, transport vehicles, vehicles for the construction sector, and specially designed and manufactured products. These products include vehicle-mounted equipment with different functions, ranging from fire trucks to garbage trucks, from vacuum trucks to sewer cleaning vehicles, from tankers to rescue vehicles, and from dump trucks to mobile maintenance vehicles.

Products for the defense industry sector include armored ADR fuel tankers, protective shields, armored dumpers, remote-controlled armored tracked excavators, armored lowbed trailers, armored water tankers, armored dumpers, armored excavator-loader construction machinery, armored buses, 4x4 armored ambulances, armored personnel carriers (APCs), riot control vehicles (RCV), and remote controlled shooting platforms (RCSP).

2.2. Responsible Person for The Report

The persons responsible for collecting the activity data required for preparing the Greenhouse Gas Inventory Report, coordinating the work, and reviewing the prepared report are listed in Section 1.1 of the report.

2.3. Reporting Period and Reporting Frequency

The report covers the period from 1 January to 31 December 2025, as indicated on the cover page. The greenhouse gas inventory report is prepared annually.

2.4. Organizational Boundaries

The organizational boundaries of the Corporate Greenhouse Gas Inventory have been established based on the Operational Control Approach in accordance with the GHG Protocol. Accordingly, the facilities listed below have been included within the reporting boundary. The report covers activities carried out at these facilities, and a consistent methodology has been applied throughout all calculations.

Location Name and Addresses

Headquarters - Atatürk Organize Sanayi Bölgesi, 10032 Sokak No:10 Çiğli/İZMİR

Affiliated Company 1 (Gimkat Araç Üstü Ekipman San. ve Tic. A.Ş.) - Atatürk Organize Sanayi Bölgesi, 10032 Sokak No:8 Çiğli/İZMİR

Affiliated Company 2 (Katmerciler Profil San. Ve Tic. A.Ş.) - Atatürk Organize Sanayi Bölgesi, 10032 Sokak No:10 Çiğli/İZMİR

Affiliated Company 3 (Isıpan Otomotiv ve Üst Ekipman Metal Makine San. Ve Tic. A.Ş.) - Atatürk Organize Sanayi Bölgesi, 10032 Sokak No: 8 Çiğli/İZMİR

Branch 1 - Başkent OSB 23.Cadde No:3 Malıköy Sincan-ANKARA– Production Branch 1

Branch 2 - Başkent OSB 22.Cadde No:9 Malıköy Sincan-ANKARA– Production Branch 2

Branch 3 – Kızılırmak Mah. 1445 Sok. The Paragon İş Mrk. Çukurambar No:2B/82 Çankaya / Ankara Branch

Branch 4 – Küçükbakkalköy Mah. Küçük Setli Sok. Denge Panorama 2015 Plaza No:5/9 D:23 K:6 Ataşehir / ISTANBUL Branch

2.5. Reporting Boundaries

The table below presents the classification of emission sources included in the organization's greenhouse gas inventory according to GHG Protocol terminology.

SCOPE	GHG Protocol Category	Emission Source	Definition
SCOPE 1	DIRECT GHG EMISSIONS	Stationary Combustion	Emissions resulting from fuel consumption in stationary combustion sources, such as paint line ovens.
		Mobile Combustion	Emissions resulting from fuel consumption in company-owned vehicles and mobile equipment
		Fugitive Emissions	Emissions resulting from refrigerant gases, fire suppression systems, and equipment leaks
SCOPE 2	ENERGY INDIRECT GHG EMISSIONS	Purchased electricity	Indirect emissions resulting from purchased electricity consumption
SCOPE 3	Category 3: Fuel- and Energy-Related Activities	Water Consumption	Indirect emissions associated with water supply and consumption
	Category 4: Upstream Transportation and Distribution	Inbound Transportation and Distribution	Emissions resulting from the transportation of purchased goods and materials
	Category 5: Waste Generated in Operations	Waste Disposal	Emissions resulting from the disposal of waste generated in operations
	Category 6: Business Travel	Business Travel	Emissions resulting from employees' business travel
		Business Travel	Emissions resulting from customer and visitor business travel.
		Hotel Stay	Emissions resulting from hotel stays associated with business travel
	Category 7: Employee Commuting	Employee Commuting	Emissions resulting from employees' commuting activities
	Category 9: Downstream Transportation and Distribution	Outbound Transportation and Distribution	Emissions resulting from the transportation of sold products.

2.6. Biologically-Based Emissions

There are no CO₂ emissions resulting from the combustion of biomass.

2.7. Greenhouse Gas Removals and Sinks

The removal, capture, and storage of greenhouse gases are not carried out within the boundaries of the facility. Due to the absence of afforestation activities within the boundaries of the facility that would qualify as a sink, afforestation activities have not been calculated as a sink source.

2.8. Greenhouse Gas Sources Excluded from the Inventory

Process emissions and biomass emissions from the organization's Category 1 emission sources have not been included in the calculation. There is no greenhouse gas emission resulting from the process. There are also no emissions of biological origin.

Only purchased electricity is calculated in the Category 2 inventory; purchased heat-steam is not included.

Meetings were held with the organization to determine which indirect emissions would be included in or excluded from the inventory and which would not, and criteria such as the magnitude/volume of indirect emissions, the level of impact on resources, access to information, and the accuracy level of relevant data were evaluated.

As a result of the evaluations, regardless of the purpose of use, the criteria were not used to exclude significant amounts of indirect emissions or to avoid compliance obligations. Significant GHG emissions were identified using the specified criteria and included in the calculations.

The following Scope 3 categories were excluded due to the absence of the necessary data:

- Category 1 – Purchased Goods and Services
- Category 2 – Capital Goods
- Category 8 – Upstream Leased Assets
- Category 10 – Processing of Sold Products
- Category 11 – Use of Sold Products
- Category 12 – End-of-Life Treatment of Sold Products
- Category 13 – Downstream Leased Assets
- Category 14 – Franchises
- Category 15 – Investments

No significant indirect emissions have been excluded; if excluded, the reasons will be reported. The materiality assessment criteria may be periodically revised. Information regarding revisions is maintained in accordance with the QMS system.

2.9. Base Year

The calculation of greenhouse gas emissions for the organization was first performed based on the base year of 2022. Within the scope of corporate sustainability reporting, 2024 has been designated as the new base year.

Greenhouse gas performance for 2025 will be evaluated comparatively against the selected base year.

No structural or methodological changes have occurred that would require a change in the base year.

In the event of a base year change, the revised base year and associated adjustments will be disclosed in subsequent reporting periods.

Base year recalculations will be performed in cases of organizational changes, methodological changes, or structural changes having a significant impact on the inventory.

2.10. Recalculation of Greenhouse Gas Inventory

In the event that the situations specified below arise at the establishment, a recalculation process will be carried out regarding greenhouse gas emissions or removals.

- a) Changes in a business boundaries,
- b) Ownership and control information for greenhouse gas sources or sinks transferred within or outside the boundaries of the establishment,
- c) Changes in greenhouse gas calculation methodologies that cause significant changes in calculated greenhouse gas emissions or removals,

Due to the lack of sufficient infrastructure for calculating greenhouse gas emissions in our country and the fact that emission factors have not been determined, international emission factors and methods have been used as a reference in the calculations. The necessary updates will be made when national references are published.

If the facility is opened/closed for a specific period, the greenhouse gas inventory will not be recalculated.

The recalculation process is carried out according to the following steps;

- The boundaries of the facility and its activities are reviewed and updated accordingly,
- Changes in direct, energy-related indirect, and other indirect greenhouse gas emissions are reviewed and re-determined,
- Greenhouse gas sources and sinks are reviewed based on the current situation, and new sources and sinks are defined if necessary.
- If there are changes in the calculation methodology, these changes are defined and the new calculation methodology is also applied to previous period calculations. All calculations are redone according to the new methodology.
- Greenhouse gas activity data is reviewed in line with the new scope/calculation methodology and updated if necessary,
- Uncertainties are recalculated,
- The greenhouse gas report is recreated to reflect the changes,

Base year recalculations shall be performed in cases of organizational changes, methodological changes, or structural changes that significantly affect the greenhouse gas inventory.

3. GREENHOUSE GAS INVENTORY DESIGN AND DEVELOPMENT

3.1. SCOPE 1: Direct Greenhouse Gas Emissions

Direct greenhouse gas emissions within the boundaries of the organization are recorded as Scope 1 in the greenhouse gas report. Table 1 lists direct and indirect emissions in the Greenhouse Gas Inventory.

3.2. SCOPE 2: Energy Indirect Greenhouse Gas Emissions

Energy-related emissions included in Scope 2 calculations include imported energy. Table 1 lists direct and indirect emissions in the Greenhouse Gas Inventory.

Energy Purchasing Institution: Gediz Retail

Scope 2 emissions were calculated using the location-based method based on the Turkish national grid emission factor.

3.3. SCOPE 3: Other Indirect Greenhouse Gas Emissions

Scope 3 emissions originate from the company's supply chain and other indirect activities (e.g., transportation, business travel, waste management). Table 1 lists direct and indirect emissions in the Greenhouse Gas Inventory.

3.4. Calculation Methodologies / Selection of Emissions and Removal Factors

Since there is no system in place to determine the amount of greenhouse gases using measurement methodologies for the emission sources listed in the organization's greenhouse gas inventory and described below, calculation-based methodologies were used.

The following references were primarily used in the calculation methodologies:

- GHG Protocol Corporate Accounting and Reporting Standard (2024)
- IPCC 2006 Guidelines
- IPCC AR6 Global Warming Potentials
- DEFRA 2025 Emission Factors
- U.S. EPA Emission Calculation Methodologies

The following formula was generally used in the calculations:

$$\text{Total CO}_2\text{e} = \text{Activity Data} \times \text{Emission Factor}$$

The IPCC AR6 was used as a reference for GWPs. The following GWP values were used for CO₂, CH₄ ve N₂O.

Alternative methods were also determined in the calculation method, and the appropriate method was selected to minimize measurement uncertainty.

GREENHOUSE GAS	FORMULA	GWP
Carbon dioxide	CO ₂	1
Methane	CH ₄	27
Nitrous Oxide	N ₂ O	273

When national sources were insufficient for selecting Emission Factors, international factors (Tier 1) were used.

For net calorific values, the source “2006 IPCC Guidelines for National Greenhouse Gas Inventories - Volume 2 - Chapter 1 Introduction - Table 1.2 Default Net Calorific Values (NCVs)” has been used.

For density values, reference was made to the “Regulation on Increasing Efficiency in the Use of Energy Sources and Energy - Annex 2: Lower heating values of energy sources and conversion factors to petroleum equivalents.”

3.5. Changes in the Previously Applied Calculation Methodology

No significant changes have been made to the calculation methodology compared to the previous reporting period.

However, the reporting framework has been aligned with the GHG Protocol: A Corporate Accounting and Reporting Standard (2024), and report terminology and emission classifications have been updated accordingly.

3.6. Uncertainty Assessment

An uncertainty assessment of the Corporate Greenhouse Gas Inventory was conducted, and the overall uncertainty level was determined to be 2.3%. The assessment concluded that the calculated uncertainty level does not have a significant impact on the accuracy or materiality of the greenhouse gas inventory. Detailed related to the uncertainty analysis are provided in the tables.

The uncertainty analysis was conducted using the IPCC's "Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories" as a reference.

3.7. Verification

This report has not been subject to independent third-party verification.

4. GREENHOUSE GAS INVENTORY AND REFERENCE TABLES

Table 1- Greenhouse Gas Inventory

SCOPE	GHG Protocol Category	Emission Source
SCOPE 1 DIRECT GHG EMISSIONS	Stationary Combustion	Fuel consumption for the paint line oven
	Mobile Combustion	Fuel consumption of company-owned heavy equipment & passenger / commercial vehicles
	Fugitive Emissions	Leakage/ fugitive emissions
SCOPE 2 ENERGY INDIRECT GHG EMISSIONS	Purchased electricity	Purchased electricity
SCOPE 3 OTHER INDIRECT GHG EMISSIONS	Category 3: Fuel- and Energy-Related Activities	Water Consumption
	Category 4: Upstream Transportation and Distribution	Inbound Transportation of Purchased Materials
	Category 5: Waste Generated in Operations	Waste Disposal and Waste Water Treatment
	Category 6: Business Travel	Employee Business Travel, Customer and Visitor Transportation
	Category 7: Employee Commuting	Employee Commuting
	Category 9: Downstream Transportation and Distribution	Outbound Transportation of Sold Materials

Table 2-Refrigerant Gas Inventory

SCOPE	GHG Protocol Category	DEFINITION	CONTENTS
SCOPE 1 DIRECT GHG EMISSIONS	Fugitive Emissions	Air Conditioners	R410A (%50HFC32-%50HFC125)
		Fire Extinguishers	CO ₂
		Refrigerators	R600A
		Water Dispensers	R134A
		Transformer Breaker	SF ₆

Table 3-SCOPE 1 Emission Faktors

SCOPE	GHG Protocol Category	CONTENT	EF (Kg/Tj) CO ₂	EF (Kg/Tj) CH ₄	EF (Kg/Tj) NO ₂	REFERENCE
SCOPE 1 DIRECT GHG EMISSIONS	Stationary Combustion	Natural Gas	74.100	3	0,6	IPCC (2006), Volume 2, Chapter 2, Tablo 2.3
	Mobile Combustion (off-road) (Forklift)	Diesel	74.100	4,15	28,6	IPCC (2006), Volume 2, Chapter 3, Tablo 3.3.1
	Mobile Combustion (Passenger Car)	Diesel	74.100	3,9	3,9	IPCC (2006), Volume 2, Chapter 3, Tablo 3.2.2
	Mobile Combustion (Passenger Car)	Gasoline	69.300	33	3,2	

SCOPE	GHG Protocol Category	CONTENT	GWP - KIP (kgCO ₂ e/kg gaz)	REFERENCE
SCOPE 1 DIRECT GHG EMISSIONS	Leakage/ fugitive emissions	R410A (%50 HFC-32 / %50 HFC-125)	1.924	DEFRA 2025 Emission Factors -Refrigerant & Other
		R600A	3	
		R134A	1.300	
		SF ₆	23.500	

Table 4- Refrigerant Leakage Rates

EMISSION SOURCE	LEAKAGE	EMISSION SOURCE
Refrigerators & Water Dispensers	0,003	IPCC (2006), Volume 3, Chapter 7, Tablo 7.9, Domestic Refrigeration
Air Conditioners	0,055	IPCC (2006), Volume 3, Chapter 7, Tablo 7.9, Residential, Commercial A/C
Transformer Breaker	0,026	IPCC (2006), Volume 3, Chapter 8, Tablo 8.3
Fire Extinguishers	0,04	IPCC -Safeguarding the Ozone Layer and the Global Climate System Report- Chapter 9, Fire Protection
Fire Suppression System	0,02	IPCC -Safeguarding the Ozone Layer and the Global Climate System Report- Chapter 9, Fire Protection

Table 5-SCOPE 2 Emission Factors

CATEGORY	GHG Protocol Category	CONTENT	EF CO ₂ e (kgCO ₂ e/kWh)	REFERENCE
SCOPE 2 ENERGY INDIRECT GHG EMISSIONS	Purchased electricity	Emission Factor for Grid-Connected Electricity Consumption	0,469*	Republic of Türkiye Ministry of Energy and Natural Resources - Türkiye Electricity Generation and Electricity Consumption Point Emission Factors Information Sheet (2025)

Tablo 6- SCOPE 3 Emission Factors

CATEGORY	GHG Protocol Category	DEFINITION	CONTENT	EF CO ₂ e	REFERENCE
KAPSAM 3 DİĞER DOLAYLI EMİSYONLAR	Category 3: Fuel- and Energy-Related Activities	Water Consumption	Water Consumption	0,19130 kgCO ₂ e/m ³	DEFRA 2025 Emission Factors -Water Supply
	Category 4: Upstream Transportation and Distribution & Category 9: Downstream Transportation and Distribution	Inbound Transportation of Purchased Materials & Outbound Transportation of Sold Materials	Cargo Ship - Vehicle Transport -Average	0,03852 kgCO ₂ e/ton.km	DEFRA 2025 Emission Factors -Freighting Goods
			Freight Flights- International (to/from non UK)	0,88939 kgCO ₂ e/ton.km	
			Freight Flights- Short-haul, (to/from UK)	1,27835 kgCO ₂ e/ton.km	
			HGV Articulated>33ton	0,07703 kgCO ₂ e/ton.km	
			HGV- All HGV's-	0,10163 kgCO ₂ e/ton.km	
	Category 5: Waste Generated in Operations	Waste Disposal and Waste Water Treatment	Industrial waste (metal,plastic,paper)-Open loop & Combustion	4,68568 kgCO ₂ e/ton	DEFRA 2025 Emission Factors -Waste Disposal
			Household residual waste (Landfilli)	497,2424 kgCO ₂ e/ton	
			Water Treatment	0,17088 kgCO ₂ e/m ³	DEFRA 2025 Emission Factors -Water Treatment
	Category 6: Business Travel	Employee Business Travel, Customer and	Flights -Domestic -Average Passenger	0,22928 kgCO ₂ e/passenger.km	DEFRA 2025 Emission Factors

		Visitor Transportation	Flights -International, -Average Passenger (to/from non-UK)	0,14253 kgCO ₂ e/ passenger.km	-Business Travel Air
			Flights -Short haul, -Average Passenger (to/from UK)	0,12786 kgCO ₂ e/ passenger.km	
			Bus- Coach	0,02776 kgCO ₂ e/ passenger.km	DEFRA 2025 Emission Factors -Business Travel Land
			Cars – Average Car	0,17304 kgCO ₂ e/km	
			Rail – National Rail	0,03546 kgCO ₂ e/ passenger.km	
		Hotel Stay	Türkiye	32,1000 kgCO ₂ e/room per night	DEFRA 2025 Emission Factors -Hotel Stay
			Portugal	19,0000 kgCO ₂ e/ room per night	
			Dubai/UAE	63,8000 kgCO ₂ e/ room per night	
			Milan/Italy	14,3000 kgCO ₂ e/ room per night	
			Moscow/Russia	24,2000 kgCO ₂ e/ room per night	
			London/UK	11,5000 kgCO ₂ e/ room per night	Hotelfootprints .org
			Accra/Ghana	24,5700 kgCO ₂ e/ room per night	
			Abidjan/Ivory Coast	24,4000 kgCO ₂ e/ room per night	
			Morocco	57,2600 kgCO ₂ e/ room per night	
			Poland	29,3300 kgCO ₂ e/ room per night	
	Category 7: Employee Commuting	Employee Commuting	Average Car -Petrol & Diesel	0,17304 kgCO ₂ e/km	DEFRA 2025 Emission Factors -Passenger Vehicles
		Employee Commuting	Large Car - Diesel	0,21007 kgCO ₂ e/km	

Table 7- Uncertainty Calculation

	C	F	H	I	J	K	L	M	N
	Uncertainty of activity data (a) (Confidence interval expressed in ± percent)	Uncertainty of emission factor (Confidence interval expressed in ± percent)	CO ₂ emissions in metric tonnes	Uncertainty of calculated emissions	Certainty Ranking	Auxiliary Variable 1	Auxiliary Variable 2	Uncertainty (%)	Uncertainty (%)
	+/- 5.0%	+/- 10.0%		$I = \sqrt{I^1 + I^2}$		(H*I)	K ²	Sub_Categorize based	Categorize based
Source description									
SCOPE-1 Stationary Combustion (Paint Line Oven)	+/- 3.5%	+/- 1.5%	59.2966	+/- 3.8%	High	2.26	5.10	3.81%	2.01%
SCOPE-1 Mobile Combustion (Offroad - Diesel)	+/- 3.5%	+/- 1.5%	36.4155	+/- 3.8%	High	1.39	1.92	2.40%	
SCOPE-1 Mobile Combustion (Onroad - Petrol)	+/- 3.5%	+/- 1.5%	125.7476	+/- 3.8%	High	4.79	22.93		
SCOPE-1 Mobile Combustion (Onroad - Diesel)	+/- 3.5%	+/- 1.5%	88.9026	+/- 3.8%	High	3.39	11.46		
SCOPE-1 Fugitive Emissions (Water Dispensers-R134 A)	+/- 5.0%	+/- 1.5%	0.0390	+/- 5.2%	Good	0.00	0.00	5.16%	
SCOPE-1 Fugitive Emissions (Refrigerators -R600 A)	+/- 5.0%	+/- 1.5%	0.0001	+/- 5.2%	Good	0.00	0.00		
SCOPE-1 Fugitive Emissions (Air Conditioners -R 410 A)	+/- 5.0%	+/- 1.5%	11.6370	+/- 5.2%	Good	0.61	0.37		
SCOPE-1 Fugitive Emissions (Transformer Breaker-SF6)	+/- 5.0%	+/- 1.5%	0.0367	+/- 5.2%	Good	0.00	0.00		
SCOPE-1 Fugitive Emissions (Fire Extinguishers -CO2)	+/- 5.0%	+/- 1.5%	0.0006	+/- 5.2%	Good	0.00	0.00		
SCOPE-1 Fugitive Emissions (Fire Suppression System-CO2)	+/- 5.0%	+/- 1.5%	0.0063	+/- 5.2%	Good	0.00	0.00		
SCOPE-1 Fugitive Emissions (Fire Drill -CO2)	+/- 5.0%	+/- 1.5%	0.0480	+/- 5.2%	Good	0.00	0.00		
SCOPE-2 Purchased Electricity	+/- 3.5%	+/- 2.5%	999.4136	+/- 4.3%	High	42.99	1,847.83	4.30%	4.30%
SCOPE-3 Category 3: Water Consumption	+/- 3.5%	+/- 1.5%	4.9639	+/- 3.8%	High	0.19	0.04	3.81%	2.97%
SCOPE-3 Category 4: Inbound Transportation / Road	+/- 7.0%	+/- 1.5%	161.9463	+/- 7.2%	Good	11.59	134.41	5.07%	
SCOPE-3 Category 4: Inbound Transportation/Maritime	+/- 7.0%	+/- 1.5%	122.8276	+/- 7.2%	Good	8.79	77.32		
SCOPE-3 Category 4: Inbound Transportation /Air	+/- 7.0%	+/- 1.5%	2.2905	+/- 7.2%	Good	0.16	0.03		
SCOPE-3 Category 5: Industrial Waste Disposal	+/- 3.5%	+/- 1.5%	0.7641	+/- 3.8%	High	0.03	0.00	4.78%	
KAPSAM-3 Category 5: Household Residual Waste Disposal	+/- 5.0%	+/- 1.5%	52.3566	+/- 5.2%	Good	2.73	7.47		
KAPSAM-3 Category 5: Water Treatment	+/- 3.5%	+/- 1.5%	4.2095	+/- 3.8%	High	0.16	0.03		
SCOPE-3 Category 6: Employees' Business Travel	+/- 7.0%	+/- 1.5%	32.9372	+/- 7.2%	Good	2.36	5.56	4.20%	
SCOPE-3 Category 6: Customer Business Travel	+/- 7.0%	+/- 1.5%	23.4251	+/- 7.2%	Good	1.68	2.81		
SCOPE-3 Category 6: Hotel Stay	+/- 3.5%	+/- 1.5%	13.6471	+/- 3.8%	High	0.52	0.27		
SCOPE-3 Category 7: Employee Commuting	+/- 3.5%	+/- 1.5%	70.9684	+/- 3.8%	High	2.70	7.30	3.81%	
SCOPE-3 Category 9: Outbound Transportation / Road	+/- 7.0%	+/- 1.5%	235.5718	+/- 7.2%	Good	16.86	284.41	10.66%	
SCOPE-3 Category 9: Outbound Transportation/Maritime	+/- 7.0%	+/- 1.5%	260.0516	+/- 7.2%	Good	18.62	346.59		
SCOPE-3 Category 9: Outbound Transportation /Air	+/- 7.0%	+/- 1.5%	4.6075	+/- 7.2%	Good	0.33	0.11		
Sum CO ₂ emissions (M):				2,312.11					
Aggregated Certainty Ranking									
Step 4: Cumulated Uncertainty:	$\pm u = \pm \frac{\sqrt{\sum_{i=1}^n (H_i * I_i)^2}}{M}$			+/- 2.3%	High				

5. CALCULATIONS AND RESULTS

➤ SCOPE 1 EMISSION CALCULATION

The fuel consumption data used in the calculation of Scope 1 emissions were sourced from the fuel invoices recorded by the facility and the annual consumption reports obtained from the vehicle identification system

Stationary Combustion Emissions

Stationary Combustion	Fuel Type	Quantity (m3)	Density (KG/m3)	Net Calorific Value* 10 ^{^6} KG (TJ/10 ^{^6} KG)	Emission Factor-CO2 (KG/TJ)	EF-CH4	EF-N2O	KGCO2e	CH4	N2O	TOTAL KGCO2e	tCO2e
Paint Line Oven	Natural Gas	32834.5160	0.67	0.000048	56100	1	0.1	59239.2457	28.5109	28.8277	59296.5842	59.2966
TOTAL												59.2966

Mobile Combustion Emissions

Mobile Combustion (Vehicle Type)	Fuel Type	Quantity (L)	Net Calorific Value (Tj/Gg) *10 ^{^6} KG (TJ/10 ^{^6} KG)	Emission Factor-CO2 (KG/Tj)	EF-CH4	EF-N2O	CH4	N2O	Total KGCO2e	tCO2e
Forklift	Diesel	12440	0.000043	74100	4.15	28.6	49.7484	3466.5352	36415.4683	36.4155
Test Vehicle	Diesel	28701.8	0.000043	74100	3.9	3.9	107.8657	1090.6423	77104.0148	77.1040
Van	Diesel	8053.21	0.000043	74100	3.9	3.9	30.2652	306.0151	21634.0330	21.6340
Car	Diesel	10054.2	0.000043	74100	3.9	3.9	37.7853	382.0517	27009.5189	27.0095
Car	Unleaded Gasoline	23427.6	0.0000443	69300	33	3.2	679.6676	666.3946	54209.0981	54.2091
Rental Car	Unleaded Gasoline	14993.5	0.0000443	69300	33	3.2	434.9831	426.4885	34693.4896	34.6935
TOTAL										251.0656

Leakage/Fugitive Emissions

The leakage rates and reference values for refrigerant gases are provided in Table 4. As all extinguishers were fully discharged during the fire drill, a 100% leakage rate was assumed. Activity data were sourced from the maintenance team's records.

Refrigerant Type	Refrigerant Capacity (kg)	Refrigerant Gas	Total Capacity (kg)	Leakage Rate	EF (KG CO2e)	Total KG CO2e	tCO2e
Fire Extinguishers	5	CO2	15	4%	1	0.6000	0.0006
Fire Suppression System	45	CO2	315	2%	1	6.3000	0.0063
Fire Drill	6	CO2	48	100%	1	48.0000	0.0480
Air Conditioners	1.571	R410 A	110	5.50%	1924	11637.0254	11.6370
Refrigerators	2.5	R 600 A	12.5	0.30%	3	0.1125	0.0001
Water Dispensers	1	R 134 A	10	0.30%	1300	39.0000	0.0390
Transformer Breaker	0.06	SF6	0.06	2.60%	23500	36.6600	0.0367
TOTAL							11.7677

➤ SCOPE 2 EMISSION CALCULATION

The calculation was performed using the monthly electricity consumption data obtained from the utility invoices.

Emissions from Purchased Electricity)

Electricity Consumption	kwh	EF - CO2 (kg/kwh)	Total KG CO2e	tCO2e
Annual Consumption Quantity	2130945.94	0.469	999413.6459	999.4136
TOTAL				999.4136

➤ SCOPE 3 EMISSION CALCULATION

Category 3: Fuel- and Energy-Related Activities

Water Supply

Municipal water is used at the facility, and water consumption data were obtained from water utility bills.

Water Consumption	Quantity (m3)	EF (kgCO2e/m3)	TOTAL KG CO2e	tCO2e
Annual Water Consumption	25948	0.19130	4963.8524	4.96385
TOTAL				4.96385

Category 4: Upstream Transportation and Distribution

Average transportation distances from the supplier's location (country/city) to the delivery location of the purchased raw materials/materials were used for the calculations. The sources for these average distance values are listed below:

- For maritime transportation: routescanner.com
- For road and air transportation: distance.to

The data were obtained from the company's internal system records.

Transport Activity	Type	Size	Location	km	ton	ton.km	EF (KG CO2e)	Total KG CO2e	tCO2e
Cargo Ship	Vehicle Transport	Average	UAE	6400	377.6	2416640	0.03852	93088.97	93.09
Cargo Ship	Vehicle Transport	Average	UAE	2636	262.254	691301.544	0.03852	26628.94	26.63
Cargo Ship	Vehicle Transport	Average	UAE	6210	13	80730	0.03852	3109.72	3.11
TOTAL									122.8276

Flight Type	Size / Laden	Location	km	ton	ton.km	Transport Activity	EF (KG CO2e)	Total KG CO2e	tCO2e
Freight flights	International	Average	Germany	1948	0.061	118.828	0.88939	105.6844	0.1057
Freight flights	International	Average	Austria	1495	0.0361	53.9695	0.88939	47.9999	0.0480
Freight flights	International	Average	India	5231	0.004	20.924	0.88939	18.6096	0.0186
Freight flights	International	Average	HongKong	8233	0.229	1885.357	0.88939	1676.8177	1.6768
Freight flights	International	Average	France	2224	0.018	40.032	0.88939	35.6041	0.0356
Freight flights	International	Average	Italy	1300	0.048	62.4	0.88939	55.4979	0.0555
Freight flights	International	Average	UK	2635	0.104	274.04	1.27835	350.3190	0.3503
TOTAL									2.2905

Transport Activity	Type	Size / Laden	Location	km	ton	ton.km	EF (KG CO2e)	Total KG CO2e	tCO2e
HGV (all diesel)	Articulated>33ton	Average	France	3025	0.552	1669.8	0.07703	128.62	0.13
HGV (all diesel)	Articulated>33ton	Average	Holland	2942	162.887	479214	0.07703	36913.84	36.91
HGV (all diesel)	All HGV's	Average	Italy	2498	9.11801	22776.8	0.07703	1754.50	1.75
HGV (all diesel)	Articulated>33ton	Average	Germany	2587	337	872759	0.07703	67228.63	67.23
HGV (all diesel)	Articulated>33ton	Average	Austria	2037	1.2924	2632.62	0.07703	202.79	0.20
HGV (all diesel)	Articulated>33ton	Average	Qatar	3502	1	4393.61	0.07703	338.44	0.34
HGV (all diesel)	All HGV's	Average	Belgium	2962	0.3815	1130	0.10163	114.84	0.11
HGV (all diesel)	All HGV's	Average	UAE	3826	7.3	27929.8	0.10163	2838.51	2.84
HGV (all diesel)	All HGV's	Average	Poland	2465	2.09302	5159.29	0.10163	524.34	0.52
HGV (all diesel)	All HGV's	Average	Ankara	587	262	153794	0.10163	15630.08	15.63
HGV (all diesel)	Articulated>33ton	Average	Ankara	587	344	201928	0.07703	15554.51	15.55
HGV (all diesel)	All HGV's	Average	Istanbul	478	16.7	7982.6	0.10163	811.27	0.81
HGV (all diesel)	All HGV's	Average	Manisa	40	100	4000	0.10163	406.52	0.41
HGV (all diesel)	Articulated>33ton	Average	Manisa	40	11	440	0.07703	33.89	0.03
HGV (all diesel)	Articulated>33ton	Average	Manisa-Ankara	561	25	14025	0.07703	1080.35	1.08
HGV (all diesel)	All HGV's	Average	Bursa-Ankara	385	19	7315	0.10163	743.42	0.74
HGV (all diesel)	All HGV's	Average	Eskişehir-Ankara	234	1.2	280.8	0.10163	28.54	0.03
HGV (all diesel)	All HGV's	Average	Aydın	108	56.5	6102	0.10163	620.15	0.62
HGV (all diesel)	All HGV's	Average	Kocaeli	463	77.8	36021.4	0.10163	3660.85	3.66
HGV (all diesel)	Articulated>33ton	Average	Kocaeli	463	42	19446	0.07703	1497.93	1.50
HGV (all diesel)	Articulated>33ton	Average	Ankara-Kocaeli	370	157	58090	0.07703	4474.67	4.47
HGV (all diesel)	All HGV's	Average	Ankara-Kocaeli	370	14.8	5476	0.10163	556.53	0.56
HGV (all diesel)	All HGV's	Average	Diyarbakır	1411	3	4233	0.10163	430.20	0.43
HGV (all diesel)	All HGV's	Average	Mersin	875	24	21000	0.10163	2134.23	2.13
HGV (all diesel)	All HGV's	Average	Konya	556	21.2	11787.2	0.10163	1197.93	1.20
HGV (all diesel)	All HGV's	Average	Balıkesir	205	2.1	430.5	0.10163	43.75	0.04
HGV (all diesel)	All HGV's	Average	Uşak	220	4	880	0.10163	89.43	0.09
HGV (all diesel)	All HGV's	Average	Ankara-Istanbul	446	59.7	26626.2	0.10163	2706.02	2.71
HGV (all diesel)	All HGV's	Average	Izmir	25	79.3	1982.5	0.10163	201.48	0.20
TOTAL									161.9463

Category 5: Waste Generated in Operations

Domestic wastewater generated at the facility is discharged to the municipal sewerage system and treated at the Organized Industrial Zone (OIZ) or municipal wastewater treatment plants. Wastewater data were obtained from utility bills.

Waste generation data were obtained from waste declaration records. In addition, domestic waste generation was estimated using the Turkish Statistical Institute (TurkStat) Municipal Waste Statistics and Indicators (2024), based on the average municipal waste generation rate of 1.09 kg/person/day.

Waste Type	Quantity (ton)	EF (kgCO ₂ e/ton)	TOTAL KG CO ₂ e	tCO ₂ e
Metal	127.88	4.68586	599.2278	0.5992
Paper	10.3	4.68586	48.2644	0.0483
Industrial Waste	21.883	4.68586	102.5407	0.1025
Household Waste	105.294	497.2424	52356.6455	52.3566
Glass	3	4.68586	14.0576	0.0141
TOTAL				53.1207

Wastewater Quantity	Quantity (m ³)	EF (kgCO ₂ e/m ³)	TOTAL KG CO ₂ e	tCO ₂ e
Annual Wastewater Quantity	24633.98000	0.17088	4209.454502	4.2095
TOPLAM				4.2095

Category 6: Business Travel

The data were obtained from the company's internal system records.

Carbon emissions from customer and visitor business travel paid for by the organization were also included in the calculations under this category.

Customer-Visitor Business Travel

Travel Type	Class	Route	Number of People	km	person.km	EF (KG CO ₂ e)	TOTAL KG CO ₂ e	tCO ₂ e
Flight	Average passenger	Izmir-Ankara	18	521	9378	0.22928	2150.1878	2.1502
Flight	Average passenger	Izmir-Istanbul	3	328	984	0.22928	225.6115	0.2256
Flight	Average passenger	Izmir-Ashgabat	1	2720	2720	0.14253	387.6816	0.3877
Flight	Average passenger	Izmir-London	2	2594	5188	0.12786	663.3377	0.6633
Flight	Average passenger	Izmir-Ghana	4	4570	18280	0.14253	2605.4484	2.6054
Flight	Average passenger	Izmir-Gothenburg	1	2424	2424	0.14253	345.4927	0.3455
Flight	Average passenger	Izmir-Zurich	2	1816	3632	0.14253	517.6690	0.5177
Flight	Average passenger	Istanbul-Dubai	4	3000	12000	0.14253	1710.3600	1.7104
Flight	Average passenger	Istanbul-Accra/Ghana	1	4965	4965	0.14253	707.6615	0.7077
Flight	Average passenger	Ankara-Casablanca	2	3461	6922	0.14253	986.5927	0.9866
Flight	Average passenger	Ankara-Nairobi	5	4600	23000	0.14253	3278.1900	3.2782
Flight	Average passenger	Dubai-Accra	4	6302	25208	0.14253	3592.8962	3.5929
Flight	Average passenger	Dubai-Nairobi	3	3563	10689	0.14253	1523.5032	1.5235
Flight	Average passenger	Dubai-Niamey/Nijer	3	5670	17010	0.14253	2424.4353	2.4244
Flight	Average passenger	Dubai-Casablanca	1	6079	6079	0.14253	866.4399	0.8664
Flight	Average passenger	Dubai-Jeddah	1	1699	1699	0.14253	242.1585	0.2422
Flight	Average passenger	Dubai-Moscow	1	3684	3684	0.14253	525.0805	0.5251
Flight	Average passenger	Jeddah-Accra	1	4603	4603	0.14253	656.0656	0.6561
Coach	Average passenger	Izmir-Ankara	1	586	586	0.02776	16.2674	0.0163
TOTAL								23.4251

Employee Business Travel

Travel Type	Class	Route	Number of People	km	person.km	EF (KG CO2e)	TOTAL KG CO2e	tCO2e
Flight	Average passenger	Izmir-Ankara	61	521	31781	0.22928	7286.7477	7.2867
Flight	Average passenger	Izmir-Istanbul	42	328	13776	0.22928	3158.5613	3.1586
Flight	Average passenger	Izmir-Antalya	5	356	1780	0.22928	408.1184	0.4081
Flight	Average passenger	Izmir-Adana	1	737	737	0.22928	168.9794	0.1690
Flight	Average passenger	Istanbul-Bodrum	1	457	457	0.22928	104.7810	0.1048
Flight	Average passenger	Ankara-Mersin	1	380	380	0.22928	87.1264	0.0871
Flight	Average passenger	Ankara-Gaziantep	1	506	506	0.22928	116.0157	0.1160
Flight	Average passenger	Izmir-Tbilisi	4	1544	6176	0.14253	880.2653	0.8803
Flight	Average passenger	Izmir-Bosnia	2	948	1896	0.14253	270.2369	0.2702
Flight	Average passenger	Izmir-London	10	2594	25940	0.12786	3316.6884	3.3167
Flight	Average passenger	Izmir-Milan	4	1714	6856	0.14253	977.1857	0.9772
Flight	Average passenger	Izmir-Doha	3	2714	8142	0.14253	1160.4793	1.1605
Flight	Average passenger	Izmir-Moscow	1	2076	2076	0.14253	295.8923	0.2959
Flight	Average passenger	Izmir-Ashgabat	2	2720	5440	0.14253	775.3632	0.7754
Flight	Average passenger	Izmir-Krakow	6	1412	8472	0.14253	1207.5142	1.2075
Flight	Average passenger	Izmir-Baghdad	3	1649	4947	0.14253	705.0959	0.7051
Flight	Average passenger	Izmir-Casablanca	3	3152	9456	0.14253	1347.7637	1.3478
Flight	Average passenger	Izmir-Dubai	4	3018	12072	0.14253	1720.6222	1.7206
Flight	Average passenger	Izmir-Accra	4	4570	18280	0.14253	2605.4484	2.6054
Flight	Average passenger	Izmir-Abidjan	1	4831	4831	0.14253	688.5624	0.6886
Flight	Average passenger	Izmir-Alexandria	2	832	1664	0.14253	237.1699	0.2372
Flight	Average passenger	Izmir-Niamey	2	3699	7398	0.14253	1054.4369	1.0544
Flight	Average passenger	Istanbul-Nairobi	1	4770	4770	0.14253	679.8681	0.6799
Flight	Average passenger	Istanbul-Casablanca	1	3312	3312	0.14253	472.0594	0.4721
Flight	Average passenger	Istanbul-Dubai	4	3000	12000	0.14253	1710.3600	1.7104
Flight	Average passenger	Istanbul-Basra	1	2055	2055	0.14253	292.8992	0.2929
Flight	Average passenger	Abijan-Cairo	1	4602	4602	0.14253	655.9231	0.6559
Flight	Average passenger	Kasablanka-Lisbon	1	586	586	0.14253	83.5226	0.0835
Car	Average passenger	Izmir-Ankara	2	586	1172	0.17304	202.8029	0.2028
Car	Average passenger	Izmir-Eskişehir	1	329	329	0.17304	56.9302	0.0569
Car	Average passenger	Ankara-Edirne	1	681	681	0.17304	117.8402	0.1178
Car	Average passenger	Ankara-Tekirdağ	1	467	467	0.17304	80.8097	0.0808
Train	Average passenger	Lisbon-Porto	1	314	314	0.03546	11.1344	0.0111
TOTAL								32.9372

Hotel Stay

Accommodation	Country	Night.room	EF (KG CO2e)	TOTAL KG CO2e	tCO2e
Hotel	Türkiye	248	32.10000	7960.8000	7.9608
Hotel	Portugal	2	19.00000	38.0000	0.0380
Hotel	Morocco	49	57.26000	2805.7400	2.8057
Hotel	Dubai/UAE	31	63.80000	1977.8000	1.9778
Hotel	Milan/Italy	3	14.30000	42.9000	0.0429
Hotel	Accra/Ghana	11	24.57000	270.2700	0.2703
Hotel	Moscow/Russia	5	24.20000	121.0000	0.1210
Hotel	Abidjan / Ivory Coast	4	24.40000	97.6000	0.0976
Hotel	London	6	11.50000	69.0000	0.0690
Hotel	Poland	9	29.33000	263.9700	0.2640
TOTAL					13.6471

Category 7: Employee Commuting

The data were obtained from the company's internal system records.

Employee Shuttle Services	Vehicle Type	Fuel Type	Km	EF (KG CO2e)	TOTAL KG CO2e	tCO2e
Izmir Shuttle Services	Minibus	Diesel	62229	0.21007	13072.4460	13.0724
Izmir Shuttle Services	Coach	Diesel	164403	0.21007	7976.1478	7.9761
Ankara Shuttle Services	Minibus	Diesel	153110	0.21007	32163.8177	32.1638
Ankara Shuttle Services	Car	Diesel&Petrol	102612	0.17304	17755.9805	17.7560
TOTAL						70.9684

Category 9: Downstream Transportation and Distribution

Average transportation distances between the product dispatch location and the customers' locations (country/city) were used in the calculations. The sources for these average distance values are listed below:

- For maritime transportation: routescanner.com
- For road and air transportation: distance.to

The data were obtained from the company's internal system records.

Flight Type	Size / Laden	Location	km	ton	ton.km	Transport Activity	EF (KG CO2e)	Total KG CO2e	tCO2e
Freight flights	International	Average	Tunisia	1697	0.884	1500.148	0.88939	1334.22	1.33
Freight flights	International	Average	UAE	3027	0.147	444.969	0.88939	395.75	0.40
Freight flights	International	Average	Qatar	2677	0.114	305.178	0.88939	271.42	0.27
Freight flights	International	Average	Turkmenistan	2796	1.048	2930.208	0.88939	2606.10	2.61
TOTAL									4.6075

Transport Activity	Type	Size	Location	km	ton	ton.km	EF (KG CO2e)	Total KG CO2e	tCO2e
Cargo Ship	Vehicle Transport	Average	UAE	6400	86.95	556480	0.03852	21435.61	21.44
Cargo Ship	Vehicle Transport	Average	Qatar	6400	129.92	831488	0.03852	32028.92	32.03
Cargo Ship	Vehicle Transport	Average	Morocco	4444	410.65	1824928.6	0.03852	70296.25	70.30
Cargo Ship	Vehicle Transport	Average	Mauritius	27451	10.62	291529.62	0.03852	11229.72	11.23
Cargo Ship	Vehicle Transport	Average	Republic of South Africa	23920	88.44	2115484.8	0.03852	81488.47	81.49
Cargo Ship	Vehicle Transport	Average	Gabon	9376.676	13.74	128835.5282	0.03852	4962.74	4.96
Cargo Ship	Vehicle Transport	Average	Uganda	6661.644	21.8	145223.8392	0.03852	5594.02	5.59
Cargo Ship	Vehicle Transport	Average	Chad	9410.012	42.8	402748.5136	0.03852	15513.87	15.51
Cargo Ship	Vehicle Transport	Average	Tunisia	2634	83.58	220149.72	0.03852	8480.17	8.48
Cargo Ship	Vehicle Transport	Average	Angola	10286	22.77	234212.22	0.03852	9021.85	9.02
TOTAL									260.0516

Transport Activity	Type	Size / Laden	Location	km	ton	ton.km	EF (KG CO2e)	Total KG CO2e	tCO2e
HGV (all diesel)	Articulated>33ton	Average	Georgia	1860	24.42	45421.2	0.07703	3498.80	3.50
HGV (all diesel)	Articulated>33ton	Average	Turkmenistan	4387	1.05	4606.35	0.07703	354.83	0.35
HGV (all diesel)	Articulated>33ton	Average	Iraq	2030	1424.71	2892153.2	0.07703	222782.56	222.78
HGV (all diesel)	Articulated>33ton	Average	Albania	1161	21.66	25147.26	0.07703	1937.09	1.94
HGV (all diesel)	Articulated>33ton	Average	Poland	2465	23.31	57459.15	0.07703	4426.08	4.43
HGV (all diesel)	Articulated>33ton	Average	Bulgaria	755	7.24	5466.2	0.07703	421.06	0.42
HGV (all diesel)	Articulated>33ton	Average	UAE	3826	7.3	27929.8	0.07703	2151.43	2.15
TOTAL									235.5718

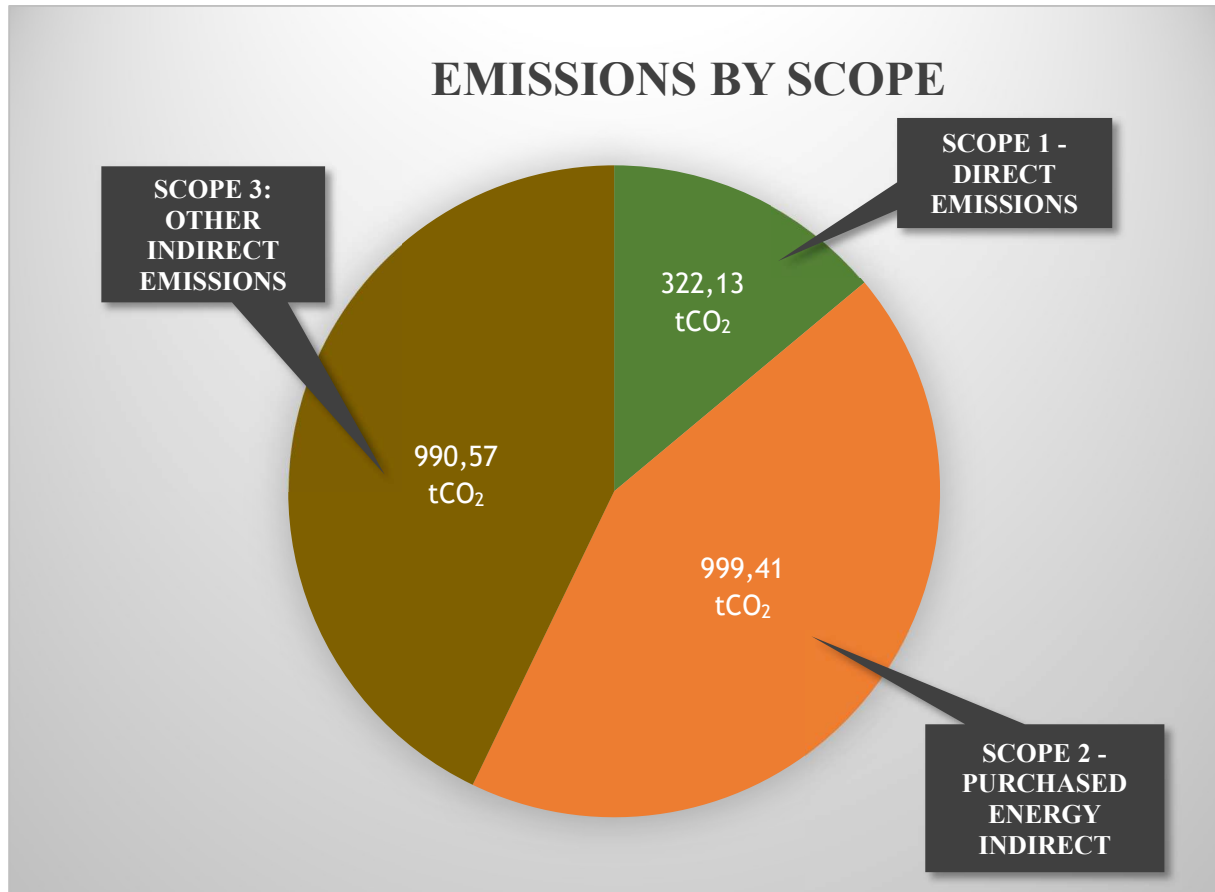
6.CONCLUSION

6.1. Analysis and Assessment

In 2025, the headquarters, branches, and three subsidiaries of KATMERCİLER ARAÇ ÜSTÜ EKİPMAN SAN. VE TİC.A.Ş. generated a total consolidated greenhouse gas emission of **2,312.11 tCO₂e**. Based on the production of 760 vehicle-mounted equipment units during the reporting year, the greenhouse gas emission intensity was calculated as **3.04 tCO₂e** per unit produced.

Scope 1 Emissions (Direct Emissions) were 322.13tCO₂e, Scope 2 Emissions (Energy Indirect Emissions) 999.41 tCO₂e, and Scope 3 Emissions (Other Indirect Emissions) 990.57 tCO₂e. The percentage representation of emissions by scope is shown in the graph below.

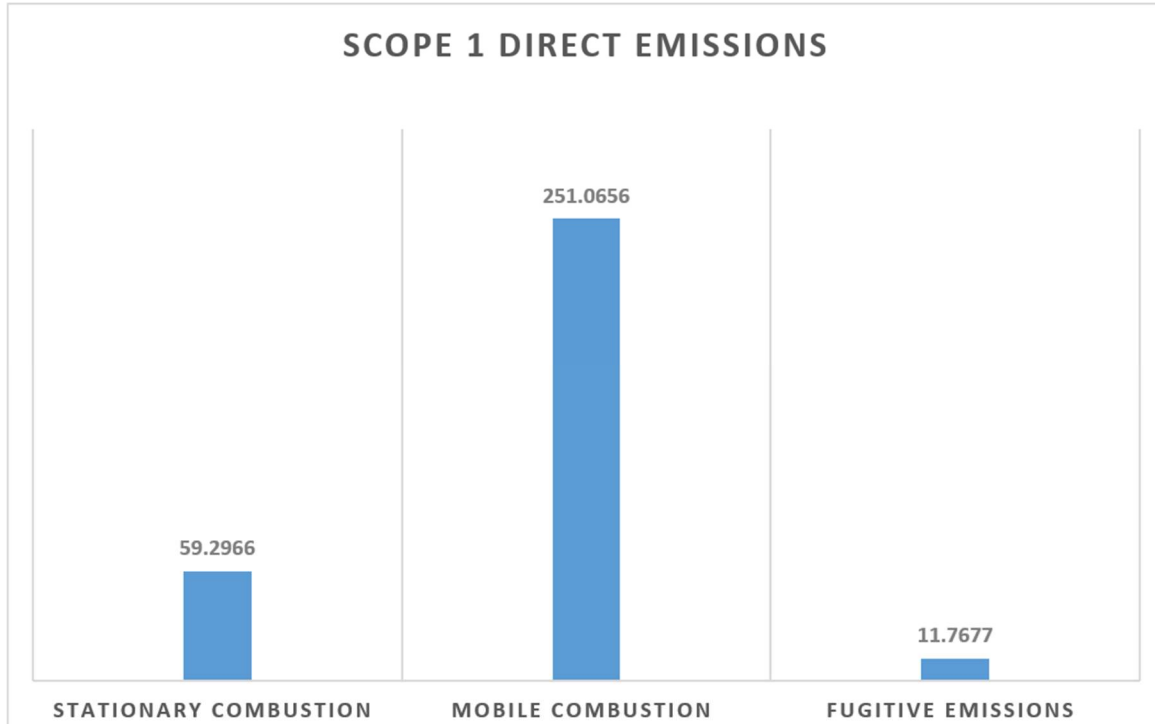
The 2025 Greenhouse Gas Inventory results show that the company's electricity consumption-related emissions and other indirect emissions are the most significant items in terms of GHG emissions. Scope 2 emissions from electricity consumption account for 43.2% of total greenhouse gas emissions, while Scope 3 indirect emissions account for 42.8%.



As a result of the Scope 1 emission calculations:

- Stationary Combustion emissions were calculated as 59.2966 tCO₂e,
- Mobile Combustion emissions were calculated as 251.0656 tCO₂e,
- Fugitive emissions were calculated as 11.7677 tCO₂e.

The distribution of Scope 1 emissions by category is shown in the graph below.



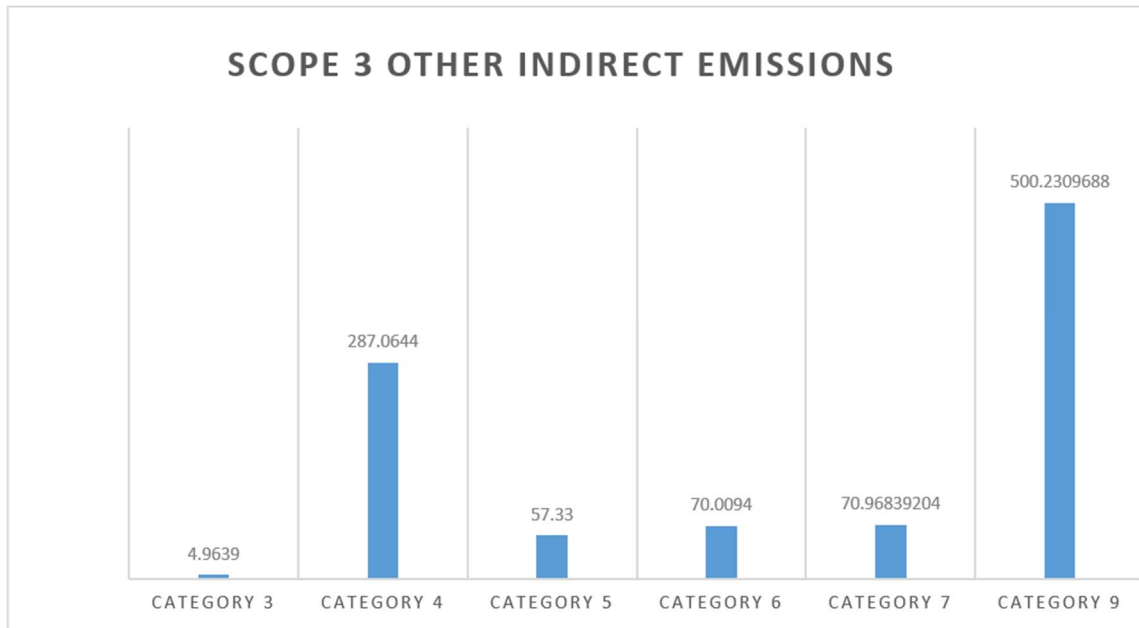
The largest contributor to Scope 1 emissions is mobile combustion associated with company-owned vehicles. These emissions amount to 251.0656 tCO₂e, accounting for approximately 78% of Scope 1 emissions and 9% of total greenhouse gas emissions.

Scope 2 emissions, based on the company's electricity consumption, have been calculated at 999.41 tCO₂e, accounting for 43.2% of total emissions.

As a result of detailed calculations of Scope 3 emissions,

- Category 3: Water Supply emissions were calculated as 4.9639 tCO₂e.
- Category 4: Upstream Transportation emissions were calculated as 287.0644 tCO₂e.
- Category 5: Waste Generated in Operations emissions were calculated as 48.0510 tCO₂e.
- Category 6: Business Travel emissions were calculated as 70.0094 tCO₂e.
- Category 7: Employee Commuting emissions were calculated as 70.9684 tCO₂e.
- Category 9: Downstream Transportation emissions were calculated as 500.2309 tCO₂e.

The distribution of Scope 3 emissions by category is shown in the graph below.



Within Scope 3 emissions, inbound and outbound transportation are the two largest contributors to the organization's total greenhouse gas emissions. Emissions from inbound transportation amounted to 287.0644 tCO₂e, accounting for approximately 12% of total greenhouse gas emissions, while emissions from outbound transportation amounted to 500.2309 tCO₂e, representing approximately 22% of total greenhouse gas emissions.

6.2 Base Year Comparison

Emission Category	2024 (tCO ₂ e)	2025 (tCO ₂ e)	Change (%)
Scope 1	375.83	322.13	14.3% decrease
Scope 2	807.19	999.41	23.8% increase
Scope 3	886.16	990.57	11.8% increase
TOTAL	2069.17	2312.11	%11.7 increase

The 2025 greenhouse gas emissions were evaluated in comparison with the base year, 2024. The assessment indicated an increase in the total greenhouse gas emissions compared to the base year.

The main factors contributing to this increase were identified as:

- the increase in operational activity levels,
- improvements in the quality of the data included within the reporting boundary,
- more comprehensive monitoring of Scope 3 emission categories, and
- changes in logistics and business travel activities.

To monitor the organization's greenhouse gas performance independently of changes in operational activity levels, greenhouse gas emission intensity indicators were also evaluated. Emission intensity was calculated based on the annual production of vehicle-mounted equipment. The organization produced 739 vehicle-mounted equipment units in 2024 and 760 vehicle-mounted equipment units in 2025.

Emission Intensity Indicator	2024	2025	Değişim
Total GHG Emissions per Unit Produced (tCO ₂ e/unit)	2.80	3.04	8,6% increase
Scope 1 & Scope 2 GHG Emissions per Unit Produced (tCO ₂ e/unit)	1.60	1.74	8,8% increase

The increase observed in the greenhouse gas emission intensity indicators is attributed to higher energy consumption and changes in operational activity levels. The organization aims to improve its greenhouse gas emission intensity performance in the coming years through enhanced energy efficiency, sustainable logistics practices, and continuous improvements in data management.

6.3. Areas for Improvement and Targets

Priority issues in terms of greenhouse gas emissions have been analyzed in the previous section.

To minimize the climate change-related risks identified in the 2025 Corporate Greenhouse Gas Inventory Report and to further enhance climate-related opportunities, the organization will implement the following improvement actions:

1. Raising awareness by providing awareness training to company personnel and repeating the training regularly,
2. Energy management and energy efficiency efforts,
3. Equipment, process, and procedure improvements,
4. Planning fuel changes for company vehicles and beginning the transition to electric vehicles,
5. Efforts to establish a sustainable supply chain,
6. Improvements in transportation and shipping process planning.

Improvements in the supply chain area in particular (creating a sustainable supply chain, integrating criteria that highlight environmental performance in supplier evaluation processes), organizing employee training programs, and developing internal communication strategies to raise environmental awareness will help the company further reduce its environmental impact.

7.CONTACT AND COMPANY INFORMATION

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