



## KATMERCİLER

### 2022 CARBON INVENTORY REPORT



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## 1. ABOUT KATMERCİLER

Founded in 1985, Katmerciler has 38 years of experience in both the Turkish On Truck Chassis Superstructures Equipment sector and the Turkish defence industry.

The company, which has a wide product range of the sector with the production of different on-vehicle equipment, all of which have quality certificates, carries out turnkey production under a single roof. The product range includes the design and production of Fire Fighting Vehicles, Environmental Vehicles, Transport Vehicles, Vehicles for Defence Industry, Vehicles for Construction Industry and Special Products.



With its production capability based on advanced technology, Katmerciler took its first step towards the defence industry with riot control vehicles (RCV) and started RCV production in 2010.

Within the framework of its strategy to concentrate on the defence industry after RCV production, Katmerciler obtained a Facility Security Certificate from the Ministry of National Defence and started the production of armoured wheeled vehicles (armoured personnel carrier APC, armoured ambulance, armoured construction equipment, new generation criminal investigation vehicle KIRAÇ, etc.).

The design and development of these vehicles is carried out at the accredited R&D centre within the company.

Katmerciler carries out its on truck chassis superstructures activities in the facilities owned by Katmerciler Group, consisting of 17,801 m<sup>2</sup> closed area on a 31,552 m<sup>2</sup> land in Izmir Cigli Ataturk Organized Industrial Zone.

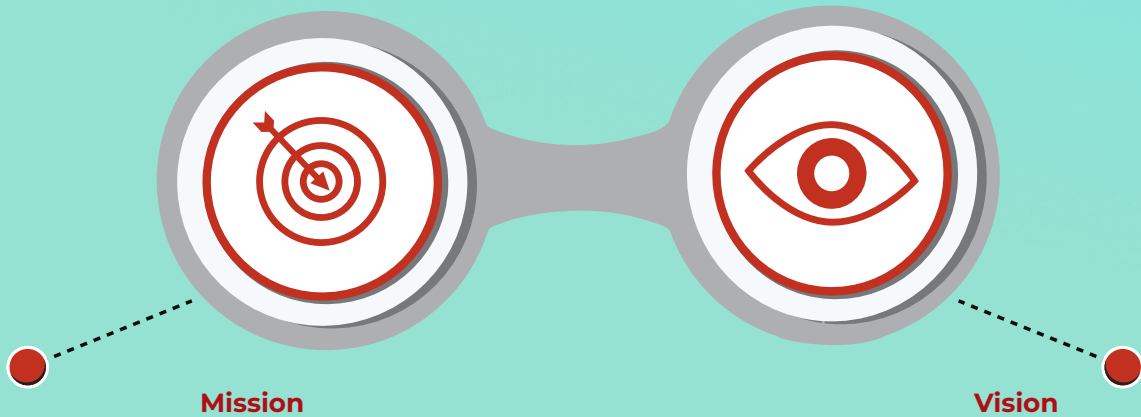
Since 2018, the Company has been carrying out its defence industry activities mainly in its facilities located in Ankara Capital Organized Industrial Zone.



## Milestones

1985	Katmerciler Araç Üstü Ekipman Sanayi ve Ticaret A.Ş. was established to serve in the superstructure for vehicles sector	2014	ISO 10002 Customer Satisfaction Management System Certificate is obtained
1988	Exports to Japan begun	2015	An 'R&D Center' officially approved by the Ministry of Science, Industry, and Technology is established
1999	TSE EN ISO 9001 Quality Management System certificate was obtained	2016	Production Authorization Certificate is obtained from the Ministry of National Defense ADR Production and Production Conformity certificate was obtained The number of export countries surpassed 50 The initial prototype of the 'Armored Ambulance' was completed
2005	TS EN ISO 14001 Environmental Management System certificate was obtained	2017	The Production Authorization Certificate was received from the Ministry of National Defense for the manufacturing of 4x4, 6x6, and 8x8 Wheeled Armored Personnel Carrier Vehicles, as well as 4x4, 6x6, and 8x8 Tactical Wheeled Armored Combat Vehicles
2009	R&D studies were initiated in partnership with TÜBİTAK	2018	The ATEŞ Armored Border Security Vehicle, a collaborative project with Aselsan, was completed and successfully passed all performance tests  The KIRAC – 4x4 New Generation Criminal Investigation Vehicle was finalized, successfully passed all performance tests, and was prepared for mass production
2010	Katmerciler took its initial step into the defense industry, leveraging its advanced technology-based production capabilities through the development of riot control vehicles (RCVs)  Katmerciler has been listed Borsa İstanbul	2019	ISO 45001 Occupational Health and Safety certificate was obtained
2011	In the EBSO list, Katmerciler received the top accolades as the company providing the highest employment in production within its sector, the company achieving the highest production output, the leader in exports, and the top taxpayer in its sector, securing the first prize in each category	2020	The company ranked as one of the top 250 companies with the highest R&D expenditures in Türkiye
2012	EN ISO 3834-2 Welding System Certificate and TS 18001 OHSAS Occupational Health and Safety Certificate are obtained	2021	First Sustainability Report was published "Zero Waste Certificate" was obtained from the Provincial Directorate of Environment, Urbanization and Climate Change of the Governorship of İzmir Katmerciler unveiled the Hızır II – 4x4 Mine Resistant Ambush Protected Vehicle and Eren – 4x4 Tactical Urban Warfare Vehicle at the 15 <sup>th</sup> International Defense Industry Fair (IDEF'21)
2013	Facility Security Certificate is received from the Ministry of National Defense	2022	The goal of exporting to over 75 countries was achieved The New Generation 4x4 Khan – Armored Personnel Carrier and 4x4 Hızır – Mine Resistant Ambush Protected (MRAP) vehicles were delivered to the United Nations Our product range has expanded to include the Tank Carriers & Rescuer Lowbed Trailers and Military Aircraft Refuellers

## VISION AND MISSION



### Mission

With a production approach rooted in customer satisfaction, along with sales and after-sales support that consistently safeguards customer rights, a consciousness closely tracking technological advancements, and a commitment to environmental and social responsibility in all its endeavors, Katmerciler has embraced a mission to maintain leadership in its sector both domestically and internationally through ongoing growth efforts in domestic and international markets, drawing strength from the determination and support of its employees, and aiming to achieve the best for our country, customers, employees, business partners, and shareholders.

### Vision

Katmerciler's primary objective is to advance collectively with its partners, employees, suppliers, and customers and establish itself as a global brand in the Defense Industry and Superstructure for Vehicles sectors.

## **1.1 About the Report**

This report has been prepared by SZUTEST Conformity Assessment Inc. based on the activities of Katmerciler Araç Ustu Ekipman Sanayi ve Ticaret A.S.'s production facility located in Cigli / Izmir / Turkiye. Katmerciler Araç Ustu Ekipman Sanayi ve Ticaret A.S. is responsible for collecting the activity data required for the preparation of this report, coordinating the studies and checking the prepared report.

ISO 14064 standard has been used as a guideline document during the preparation of this report. In addition, databases and documents referenced on issues such as emission factors and uncertainty are listed as references.

This Carbon Emission Inventory Report has been prepared for the calendar year 2022 and the preparation period of this report is 1 year.

## **1.1 Purpose and Letter of Intent**

The purpose of this report is to create an inventory for the activities of Katmerciler Araç Ustu Ekipman Sanayi ve Ticaret A.S. by calculating carbon emissions and to ensure that carbon emissions are reduced and neutralised if possible based on the results of the inventory.

In addition, if deemed necessary by Katmerciler Araç Ustu Ekipman Sanayi ve Ticaret A.S., this report may be shared with the public and other organisations, especially customers and business partners, on issues related to carbon reduction, global warming and climate change.

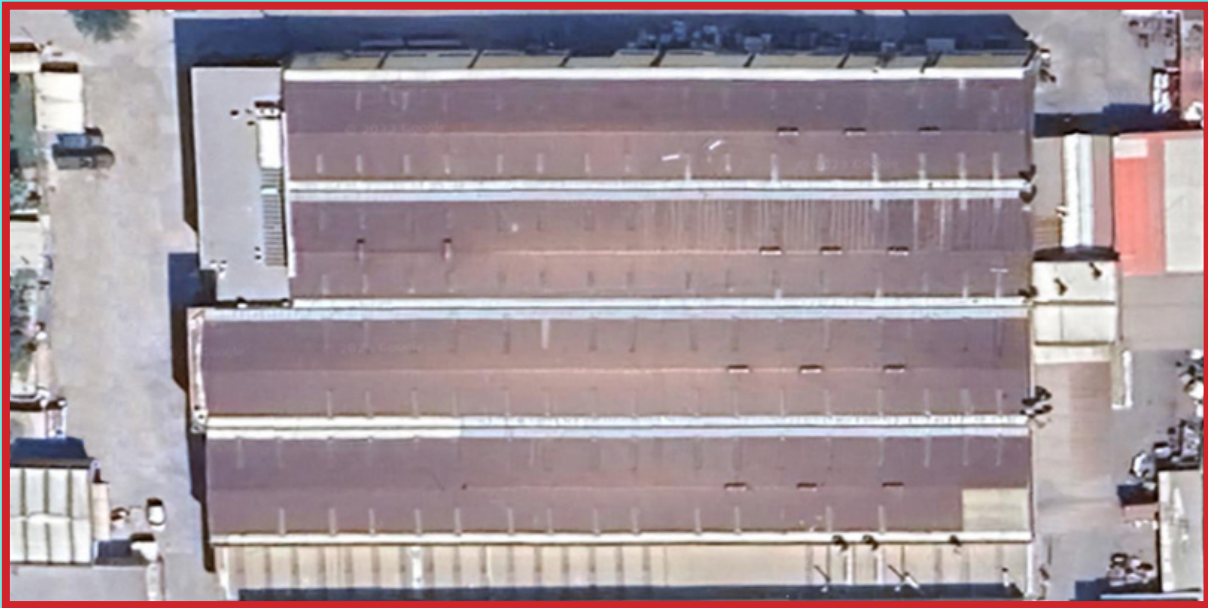
## **2 CALCULATION AND REPORTING CRITERIAS**

### **2.1 Organisational and Operational Boundaries**

#### **2.1.1 Organisational Boundaries**

In the design and development of the carbon inventory, the ISO 14064 standard control approach was adopted in determining our boundaries. This report covers the physical boundaries and activities of Katmerciler Araç Ustu Ekipman Sanayi ve Ticaret A.S.'s production facility located at 10032 Sokak No:10 in Izmir Cigli Ataturk Organised Industrial Zone (AOSB). The sketch for the relevant address is shown as marked on the Pln-1 Satellite image.

**KATMERCİLER**



Plan-1 Site Plan

Boundary Lines

Each year, before the previous year's carbon emissions are calculated, the limits are evaluated by the Company Management and updated if there is a change in the limits. Updates are recorded as a document in the management meeting and new limits are documented in the first carbon inventory report.

### 2.1.2 Operational Boundaries

Carbon emission sources and removals of the facility are identified by the Environmental Management Representative, classified as direct emissions (Scope 1), energy indirect emissions (Scope 2) and other indirect emissions (Scope 3) and recorded in the Carbon Inventory Report.

Scope	Category	Subcategory	Emission Source Tracking (unit)	Responsible Unit	Control Range
DIRECT EMISSIONS (SCOPE 1)	1.1	Production	Natural Gas (kwh)	Production	Monthly
	1.1	Kitchen	Natural Gas (kwh)	Administrative Affairs	Monthly
	1.1	Fire Extinguisher	CO2(kg)	Administrative Affairs	Annual
	1.2	Forklift	Diesel (lt)	Production	Annual
	1.4	Air Conditioner	R410 (kg)	Administrative Affairs	Annual
Energy Ind. Emiss. (SCOPE 2)	2.1	Purchased	Electricity (kwh)	Administrative Affairs	Monthly
Other Ind. Emiss. (SCOPE 3)	3.1	Purchased Transport	Vehicle-km (km)	Administrative Affairs	Annual
	3.2	Transport Sold	Vehicle-km (km)	Administrative Affairs	Annual
	3.3	Personnel Transport	Vehicle-km (km)	Administrative Affairs	Annual
	3.5	Business Travel	Total-km (km)	Administrative Affairs	Annual
	3.5	Hotel accommodation	Accommodation (pcs)	Administrative Affairs	Annual

Table -1 Operational limits



## 2.2 Base Year

The base year for the preparation of this report has been set as 2022, and the base year may be updated in case of any operational change or activity boundary change that will significantly affect the company's emission total.

## 3 CARBON EMISSION CALCULATIONS

### 3.1 Scope Calculations

Carbon emission sources of the company are identified by the Environmental Management Representative, classified as direct emissions (Scope 1), energy indirect emissions (Scope 2) and other indirect emissions (Scope 3) and recorded in the Carbon Inventory Report. Calculations are made using the Carbon Emissions Data Preparation Form within the Operational Limits table in Table 1.

The following steps are followed during the calculation:

- » Identification of carbon sources,
- » Selection of calculation methodology,
- » Selection and collection of carbon activity data (Carbon Emissions Data Preparation Form is used),
- » Selection or development of carbon emission factors,
- » Calculation of carbon emissions.

Operating data, methodological and calculation errors were reviewed and were not taken into account in the calculation since the 1% materiality limit was not exceeded.



### 3.1.1 Direct Emissions (Scope 1)

This includes direct carbon emissions from the production facility. There is no carbon dioxide (CO<sub>2</sub>) generated by carbon removals from the facility, sink area and combustion of biomass (wood, wood, plants, agricultural and forestry wastes, industrial and municipal wastes, etc.). The total Scope 1 emission for 2022 is **55.40 tonnes CO<sub>2</sub> e** (tonnes of carbon dioxide).

Scope	Category	Subcategory	Emission Cause (unit)	Responsible Unit	Control Range	Annual Utilisation (unit)	Emission Factor (Kg CO <sub>2</sub> e/consumption unit)	Annual Carbon footprint (Kg CO <sub>2</sub> e)
DIRECT EMISSIONS (SCOPE 1)	1.1	Production	Natural Gas (kwh)	Production	Monthly	10.065 (sm3)	0,3366	3.387,88
	1.1	Kitchen	Natural Gas (kwh)	Administrative Affairs	Monthly	2300,24 (sm3)	0,3366	774,26
	1.1	Fire Extinguisher	CO <sub>2</sub> (kg)	Administrative Affairs	Annual	72 (kg)	1,00	72,00
	1.2	Forklift	Diesel (lt)	Production	Annual	1.260 (lt)	0,6241	786,35
	1.4	Air conditioning	R410(kg), R134(kg)	Administrative Affairs	Annual	28,33 (kg)	1778,41*	50.382,40
* Weighted average value of the different emission factors in proportion to their utilisation.								55.402,89

Table -2 Scope - 1 Emission



### 3.1.2 Energy Indirect Emissions (Scope 2)

Greenhouse gas emissions from electricity consumed by the company by purchasing from outside are recorded as Scope 2 in the greenhouse gas report. Apart from electricity, energy for steam, direct heat, compressed air or cooling purposes is not supplied through external procurement. The total Scope 2 emission of the company for 2022 is 358.31 tonnes CO<sub>2</sub>e (tonnes of carbon dioxide).

Scope	Category	Subcategory	Emission Cause (unit)	Responsible Unit	Control Range	Annual Utilisation (unit)	Emission Factor (Kg CO <sub>2</sub> e/consumption unit)	Annual Carbon footprint (Kg CO <sub>2</sub> e)
Energy Ind. Emission (SCOPE 2)	Electricity	Purchased	Electricity (kwh)	Administrative Affairs	Monthly	814.343,52 (kwh)	0,440	358.311,15
								358.311,15

Table -3 Scope - 2 Emission



### 3.1.3 Other Indirect Emissions (Scope 3)

The fuel consumption of the materials purchased and sold by the company, regardless of who covers their cost, the fuel consumption of the vehicles used for the shuttle services of the facility employees, as well as the fuel consumption of the private passenger cars used for travelling to and from work, the annual land, air, sea travels of the facility personnel, hotel accommodation and the transmission and distribution losses in the delivery of electrical energy to the facility, calculated with the values of EMRA 2020 Electricity Market Development Report, are included under Scope-3. The total Scope 3 emission of the company for 2022 is **445.33 tonnes CO<sub>2</sub>** (tonnes of carbon dioxide).

Scope	Category	Subcategory	Emission Cause (unit)	Responsible Unit	Control Range	Annual Utilisation (unit)	Emission Factor (Kg CO <sub>2</sub> e/consumption unit)	Annual Carbon footprint (Kg CO <sub>2</sub> e)
Other Indirect Emission (SCOPE 3)	3.1	Transport - Lorry	Vehicle-km (km)	Administrative Affairs	Annual	1.143.500 (km)	0,14091	161.131
	3.1	Transport - Truck	Vehicle-km (km)	Administrative Affairs	Annual	206.900 (km)	0,21501	44.486
	3.1	Transport - Aircraft (SH)	Vehicle-km (km)	Administrative Affairs	Annual	41.000 (km)	0,20515	8.411
	3.1	Transport - Aircraft (LH)	Vehicle-km (km)	Administrative Affairs	Annual	49.800 (km)	0,13516	6.731
	3.2	Transport - Lorry (3.5-7.5)	Tonne-km (t.km)	Administrative Affairs	Annual	817.583 (t.km)	0,06984	57.100
	3.2	Transport - Lorry (7.5-17)	Tonne-km (t.km)	Administrative Affairs	Annual	221.833 (t.km)	0,04092	9.077
	3.2	Transport - Truck (3.5-33)	Tonne-km (t.km)	Administrative Affairs	Annual	691.715 (t.km)	0,01946	13.461
	3.3	Personnel Transport Minibus (C-I)	Vehicle-km (km)	Administrative Affairs	Annual	66.980 (km)	0,142120	9.519
	3.3	Personnel Transport Midibus (C-II)	Vehicle-km (km)	Administrative Affairs	Annual	163.963 (km)	0,174050	28.538
	3.3	Staff Transport Bus (C-III)	Vehicle-km (km)	Administrative Affairs	Annual	33.300 (km)	0,253460	8.440
	3.5	Business Travel	Total-km (km)	Administrative Affairs	Annual	261.310 (km)	0,22795*	59.567
	3.5	Hotel accommodation	Accommodation (pcs)	Administrative Affairs	Annual	1.167 (Person-night)	33,30386*	38.866
* Weighted average value of the different emission factors in proportion to their utilisation.								445.325,90

Table -4 Scope - 3 Emission

### 3.2 Carbon Sources and Sinks Excluded in the Calculation

- » Carbon footprints of the machine park used in production
  - » Carbon footprints of the materials used by the facility
  - » Carbon footprints from office supplies
  - » Leaks of water dispenser refrigerant gases
  - » Carbon absorption by trees within the boundaries of the facility
- Excluded from the calculation.

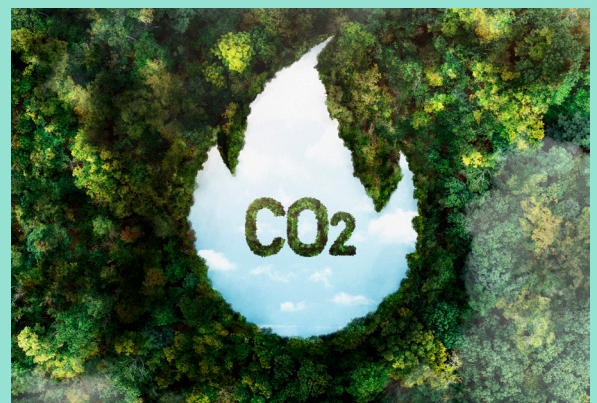
### 3.3 Other Information About Calculation

The Carbon Inventory Report for 2022 has not been verified and therefore uncertainty calculations have not been made for this year.

## 4 CONCLUSION AND EVALUATION

### 4.1 Calculation of Total Emission

As a result of the calculations made for the facility;  
 Scope 1 Direct Emissions **55,40 tonnes CO<sub>2</sub>**  
 Scope 2 Energy Indirect Emissions **358,31 tonnes CO<sub>2</sub>**  
 Scope 3 Other Indirect Emissions **445,33 tonnes CO<sub>2</sub>**  
**a total of 859,04 tonnes of CO<sub>2</sub> emissions occurred.**



## **4.2 Activities for Carbon Management Mitigation/Neutralisation**

For the year 2022, the total carbon emission determined above was evaluated in terms of production quantities in units. Accordingly, the total emission calculated for 2022 is 859.04 tonnes CO<sub>2</sub>. The same data can be enriched by evaluating the production amounts and types for 2022. 2022 has been determined as the base year, and the carbon inventory reports to be prepared in the following years will be compared with the data of this year and the course of carbon emissions can be measured. The development of the scopes and methodologies of the new reports will be reviewed every year.

## **4.3 Report Evaluation**

Carbon Inventory Reports are kept permanently in order to guide the calculations to be made in the following years. In order to reduce the emission amount calculated for 2022, trainings will be given to the personnel employed by the organisation and service procurement in 2022, and the same awareness and awareness raising trainings will continue in the coming years. In addition, considering the principle of effective use of public resources, efforts will be made to carry out one or more of the following works and transactions within the possibilities.

- » Energy demand and utilisation management
- » Energy efficiency
- » Technology and/or process improvements
- » Management of carriage and transport needs
- » Fuel replacement or substitution



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