

# Strategic Analysis of the Turkish Automotive Aftermarket

To evaluate the market potential of Turkish  
Automotive aftermarket

FINAL REPORT

MEDIUM & HEAVY COMMERCIAL  
VEHICLES

Frost & Sullivan  
June, 2026

THIS REPORT WAS COMMISSIONED  
BY **OSS ASSOCIATION.**



## About the OSS Sector Research Committee;

The Strategic Analysis of the Turkish Automotive Aftermarket report has been prepared under the coordination of the Sector Research Committee, established by the Board of Directors of the Automotive Aftermarket Products and Services Association (OSS).

The Committee worked in close collaboration with the Frost & Sullivan team to define the scope of the research, evaluate the methodology, analyze industry dynamics, oversee the data validation process, and ensure that the report accurately reflects the realities of the sector.

At OSS, we believe that reliable data is of strategic importance for the sustainable development of our industry. In line with this vision, our Sector Research Committee will continue to contribute to the industry through periodic sector assessments, thematic analyses, and market research in the years ahead.

## Committee Members;

- Ali Özçete – Chairman of the Board
- Cemal Çobanoğlu – Vice Chairman of the Board
- Emirhan Silahtaroğlu – Secretary General of the Board
- Halit Başbuğ – Board Member
- Emre Şahin – Board Member
- Ufuk Çilek – Board Member
- Orçun İstanbulluoğlu – General Coordinator

## Foreword

Every strong industry is built on accurate and reliable data. As OSS, we have long believed that one of the most critical needs of our industry is the generation of reliable and sustainable market data. Today, we are proud to have transformed this vision into a lasting structure and to have established an important reference source for our sector.

The automotive aftermarket is one of the most strategic industries supporting Türkiye's manufacturing strength, generating employment, contributing to exports, and ensuring the sustainability of the national vehicle parc. The healthy development of such a dynamic ecosystem can only be achieved through reliable, consistent, and comparable data. In today's world, the true driver of industrial progress is not only production capacity but also the ability to make informed decisions based on accurate information.

Prepared in collaboration with Frost & Sullivan, one of the world's leading research and consulting firms specializing in the automotive and mobility industries, this study represents one of the most comprehensive analyses of the Turkish automotive aftermarket conducted using an internationally recognized research methodology. Based on numerous parameters—including vehicle parc, vehicle age, usage intensity, maintenance and replacement cycles, and end-user pricing—we believe this report will serve as a reliable and sustainable reference for our industry.

The primary objective of this research is to facilitate access to reliable market data for domestic and international manufacturers, distributors, investors, public institutions, and all other industry stakeholders operating in or planning to invest in Türkiye. It is designed to support strategic decision-making processes while establishing a robust knowledge base that enables the industry's development to be monitored through common performance indicators.

We do not regard this report merely as a market research study describing the current state of the industry. Rather, we see it as an important milestone in a long-term initiative aimed at regularly measuring, analyzing, and monitoring the development of the Turkish automotive aftermarket through objective data. Our goal is to establish a permanent reference center for the industry through regularly updated market studies, periodic sector assessments, and thematic analyses, continuously strengthening the knowledge infrastructure upon which all stakeholders can confidently rely.

To support this objective, the OSS Sector Research Committee, established by members of our Board of Directors, played an active role throughout every stage of the project—from defining the scope of the research and evaluating its methodology to overseeing data validation and contributing to the preparation of the final report.

The Committee worked with great dedication to ensure that the study accurately reflects the realities of the sector. I would like to express my sincere appreciation to all Committee members for their valuable contributions. Looking ahead, our OSS Sector Research Committee will continue to strengthen the industry's knowledge base through periodic market assessments, sub-sector analyses, and thematic research. We firmly believe that reliable data is the cornerstone of sound investment decisions, effective public policies, and the sustainable development of our industry.

I would also like to extend my sincere gratitude to our Board of Directors, the members of the OSS Sector Research Committee, the Frost & Sullivan team, all industry representatives who contributed their expertise and insights to this research, and all supporting companies whose valuable contributions made this study possible.

It is our sincere hope that this report will not only provide a comprehensive picture of the current state of the industry but also guide the strategic decisions that will shape its future, becoming a trusted reference for our country, our industry, and all stakeholders for many years to come.

**Ali ÖZÇETE**

**Chairman of the Board**

Turkish Automotive Aftermarket Association (OSS)

# SUPPORTERS



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# RESEARCH OBJECTIVES, AND SCOPE

# PROJECT OBJECTIVE AND SCOPE

AIM OF THIS PROJECT IS TO PROVIDE A COMPREHENSIVE OUTLOOK OF THE TURKISH AFTERMARKET IMPACTED BY GLOBAL TRENDS AND CHALLENGES.

## BACKGROUND

The **Turkish Automotive Aftermarket Association, OSS**, is the industry's representative in Turkiye. The company is keen to conduct a study on the Turkish automotive aftermarket in order to evaluate the market size for aftermarket parts and also develop an understanding of aftermarket dynamics in line with global and local automotive industry changes.

## OBJECTIVE

- The aim of this study is to research, analyze, and forecast the Turkish automotive aftermarket with focus in
- Current market size and growth projections
  - Market size by automotive parts: Market size is calculated based on the total vehicle parc, including both OE and independent channels, using retail/end-customer parts prices only and excluding service charges.
  - Market size by channels – OEM/ OES vs. IAM
  - Market dynamics and trends
  - Megatrends impacting market (Electrification, ADAS, etc...)

## SCOPE

**Region:** Only Turkiye

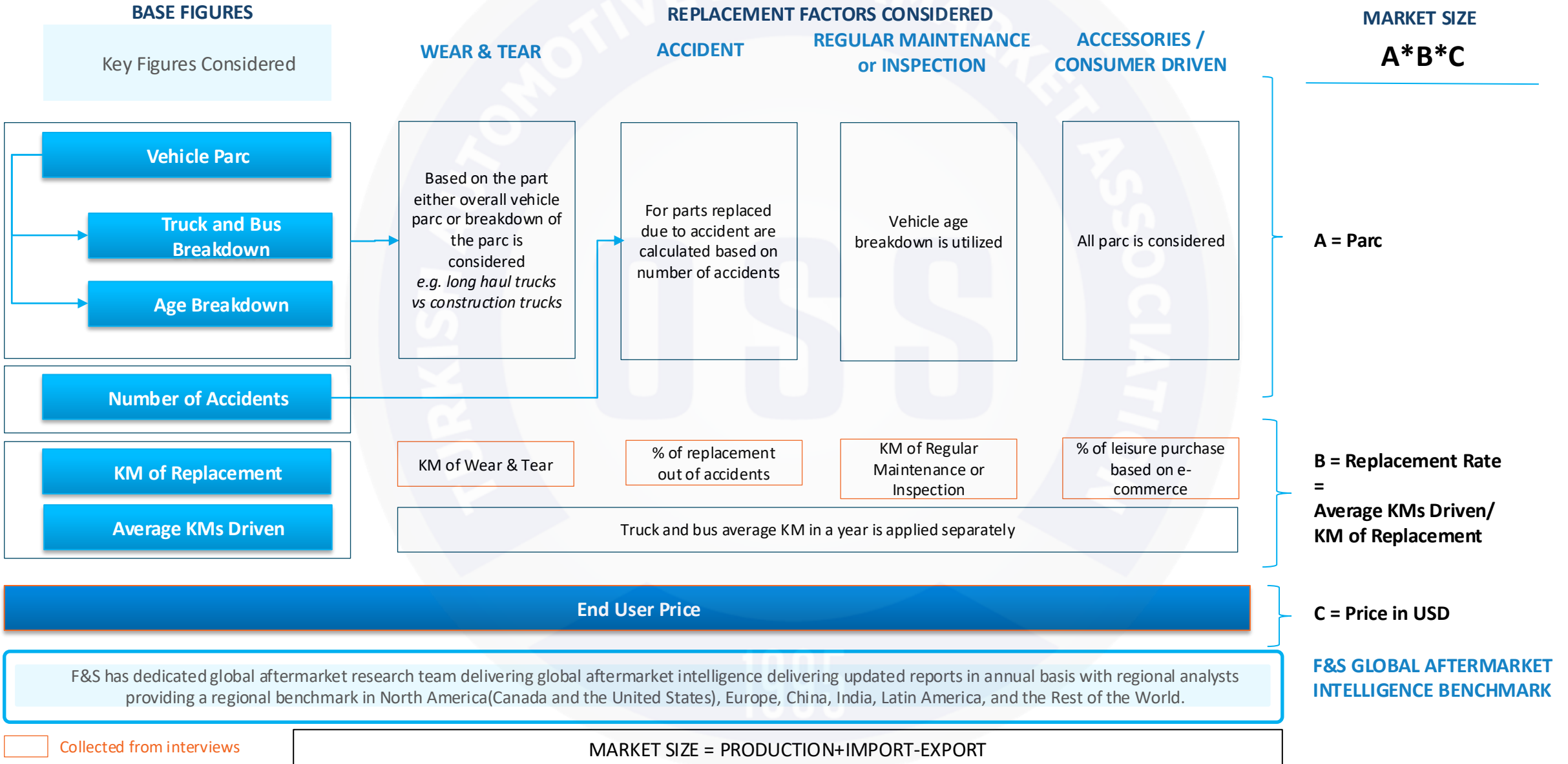
**Vehicle Scope:** Medium and Heavy Commercial Vehicles (over 3.5 tons), Buses, Coaches and Trailers – excluding Semi Trailers

**Historical Period:** 2022-2024 (past 3 years)  
**Base Year:** 2025  
**Forecast Period:** 2026-30 (next 5 years)

Product Scope	Product Scope (continued)
Tires	Engine
Batteries	Transmission
Oil	Steering and Suspension
Brake Parts	Shaft
Filters	
Collision Body	
Starters and Altemators	
Lighting	
Bearing	
Cooling system	

# METHODOLOGY

FROST & SULLIVAN METHODOLOGY IN CALCULATING MARKET SIZING COVERS PARC, REPLACEMENT RATE AND END USER PRICES MAINLY.





# MARKET OVERVIEW

# WHAT'S CHANGED COMPARED TO PREVIOUS REPORT

AGING FLEETS, RISING REPAIR COMPLEXITY, AND INCREASING ACCIDENT VOLUMES ARE DRIVING AFTERMARKET VALUE GROWTH, WHILE DECLINING VEHICLE UTILIZATION AND NEGLIGIBLE EV PENETRATION MEAN TRADITIONAL REPLACEMENT CATEGORIES REMAIN RESILIENT.

TOTAL MHCV			
Key Figures	2023	2025	CAGR
Vehicles in Parc	1,170,533	<b>1,249,511</b>	<b>1.3%</b>
Vehicle Sales	50,859	<b>49,477</b>	<b>-1.4%</b>
EV Sales	33	<b>131</b>	<b>99.2%</b>
EV Penetration in Parc	<0.01%	<b>0.02%</b>	—
Avg Kms Driven	23,704 bus / 35,808 trucks / 68,785 tractors	<b>22,712 bus / 35,204 trucks / 67,452 tractors</b>	<b>-2.1% bus / -0.8% trucks / -1.0% tractors</b>
Avg Vehicle Age	17.4	<b>18.1</b>	<b>0.8%</b>
MHCV Accident Numbers	53,522	<b>57,025</b>	<b>3.2%</b>
Auth. Service Points	350	<b>426</b>	<b>2.4%</b>
Aftermarket Revenue	\$2,382M	<b>\$2,661M</b>	<b>5.7%</b>

## 1. Vehicle Parc Evolution

### Fleet aging remains the primary structural driver of aftermarket demand

- The MHCV parc expanded from 1.17 million to 1.25 million vehicles between 2023 and 2025, growing at a modest 1.3% CAGR despite slightly declining new vehicle sales (-1.4% CAGR).
- Average fleet age increased from 17.4 to 18.1 years, reinforcing demand for maintenance, repair, and replacement parts across virtually all wear-and-tear categories.
- Electrification remains immaterial to the overall market. While EV sales increased from 33 to 131 units, EV penetration reached only 0.02% of parc, leaving the MHCV aftermarket overwhelmingly dependent on conventional powertrains.
- As a result, aftermarket growth continues to be driven primarily by fleet aging rather than fleet expansion or electrification trends.

## 2. Replacement Rate Assumptions

### Lower utilization offsets some replacement demand, while aging vehicles increase repair intensity

- Average annual mileage declined across all major MHCV segments, including buses (-2.1% CAGR), trucks (-0.8% CAGR) and tractors (-1.0% CAGR), moderating replacement frequency for distance-sensitive categories such as Oil & Fluids, Filters, and selected driveline components.
- However, the aging fleet increasingly shifts spending from routine maintenance toward higher-value repairs, supporting demand for Engine Components, Transmission Components, Suspension & Steering, Electrical Systems, and Brake Parts.
- MHCV accident volumes increased from 53.5k to 57.0k incidents (3.2% CAGR), providing an additional tailwind for Collision Body Parts, lighting systems, and repair services.

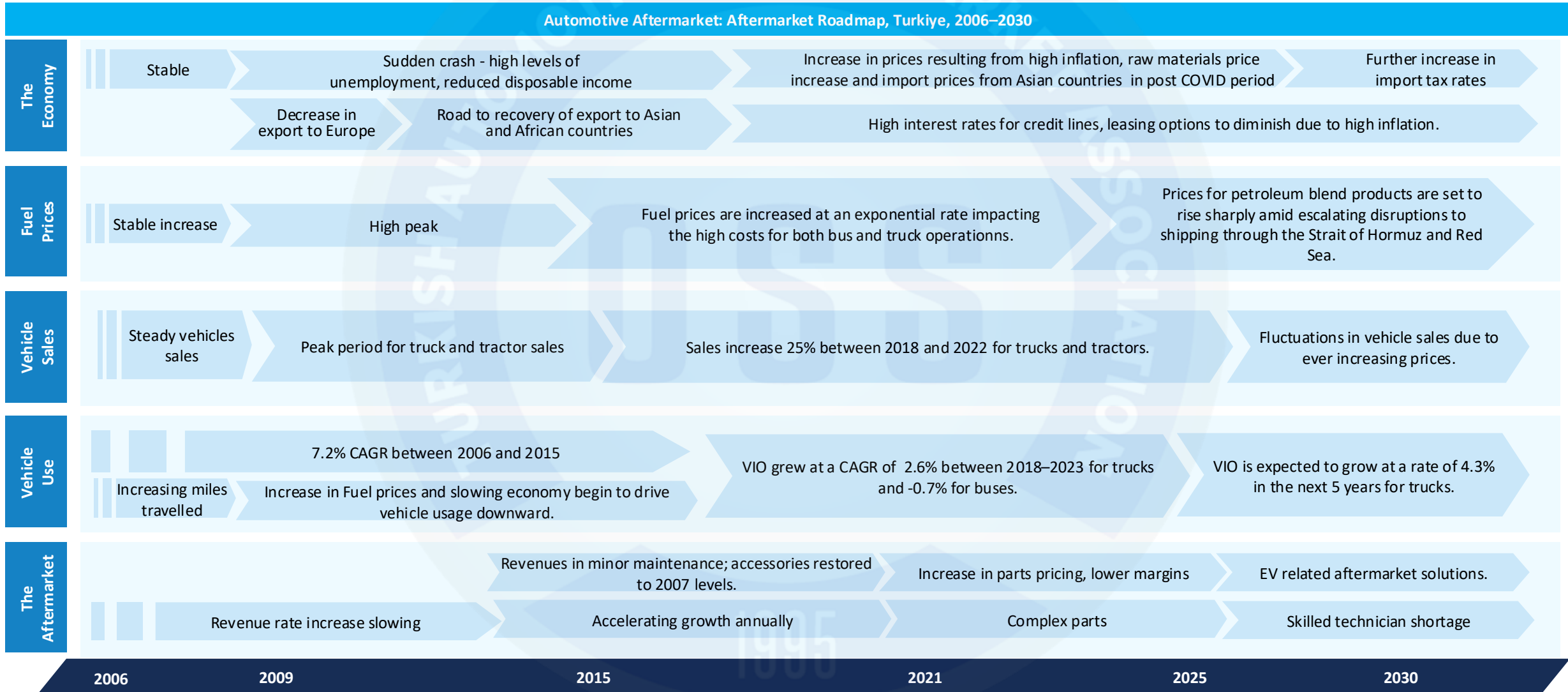
## 3. Pricing & Value Pool Evolution

### Technology complexity and inflation continue to drive value growth above parc growth

- Aftermarket revenue increased from \$2.38B to \$2.66B, representing 5.7% CAGR, significantly exceeding vehicle parc growth (1.3% CAGR).
- The gap between revenue growth and parc growth reflects sustained increases in average selling prices, driven by inflation, imported component exposure, and rising vehicle complexity.
- Categories experiencing the strongest value uplift include:
  - Transmission Components increasing penetration of automated and electronically controlled transmissions.
  - Engine Components higher-cost Euro VI emissions systems and associated replacement parts.
  - Brake Parts growing adoption of electronically controlled braking technologies.
  - Lighting & Electrical Systems migration toward LED and more sophisticated electronic architectures.
- The expansion of authorized service networks (350 → 426 locations) further supports adoption of higher-value parts and more technically complex repair procedures.

# TURKISH AFTERMARKET ROADMAP

INCREASING PRICES DUE TO INFLATION AND EXPECTED WAVE FOR SHORTAGE IN PETROLEUM PRODUCTS WILL IMPACT THE AFTERMARKET FOR MHCV'S.



Source: Frost & Sullivan Analysis

# MAJOR TRENDS IMPACTING TURKISH AFTERMARKET (1/3)

CONSIDERABLY OLDER VEHICLE PARC FOR MHCV'S AND INCREASING PRICES WILL CONTINUE TO PUSH FOR MORE ECONOMIC REPAIR SOLUTIONS AND LONGER FREQUENCY OF PERIODIC MAINTENANCE CYCLES.

Tendency to Keep Vehicles Longer & Increasing MHCV Parc

- FY2025 was a record year for medium-heavy vehicle (bus, truck, tractor, trailer) sales, with about **74,903 units** sold, a 3.0% decrease compared to 2024. **Buses sold: 8,037 – Trucks sold: 19,804 – Tractors sold: 21,636 - Trailer sold: 27,909** with trucks being the only segment that represented growth in 2025 due to rise in e-commerce activities.
- In **2025, used MHCV sales decreased by 3.0%**, impacting aftermarket services need to be increased even further
  - **60.5% of the used MHCVs sold were older than ten years**, driving demand for automotive aftermarket solutions.
  - **53.4 thousand buses and 212.3 thousand trucks** are exchanged as second-hand vehicles in 2025.
- **VIO (parc) grew by about 2.9% for MHCV between 2025 and 2024.**
  - As of 2025, the number of VIO accounted for **1,249,511 medium-heavy vehicles**.
  - The **vehicles above five years old account for 80.5% of the medium-heavy vehicle parc**, indicating a significant potential for cars needing repair and maintenance from Independent Aftermarket service providers.
- The **damages from traffic accidents increased by 9.9% in 2024 compared to 2023 for all vehicles**, with MHCV portion is estimated to be around **56 thousand vehicles**.

Financial Volatility, Price Inflation and Availability of Asian and Used Parts

- In the post-COVID period, supply chain disruptions, inflation, and TRY depreciation have driven unprecedented **price sensitivity**, prompting lower inventory levels and sharply higher service fees.
- Recent tensions around the **Strait of Hormuz** and disruptions in the **Red Sea** are beginning to strain fuel supply in Europe, which is expected to affect Turkiye's heavy MHCV fleet through reduced travel frequency and softer demand in **the lubricants aftermarket**.
- Leasing appetite is contracting sharply: With benchmark interest rates peaking near 47.5% and truck prices effectively indexed to EUR, monthly lease obligations have become unmanageable in TRY terms. Lessors are also retreating due to residual value uncertainty, making future asset valuations nearly impossible to price reliably over a 3–5 year horizon. This is shifting the fleet vehicle ownership to extending replacement cycles from the typical **4–6 years to 7–9 years** or beyond.
- All these price increases, and availability of more economic Asian parts that do not require testing are becoming a choice of usage along with used parts that are in general not regulated.

# MAJOR TRENDS IMPACTING TURKISH AFTERMARKET (2/3)

THE TURKISH MHCV AFTERMARKET FACES STRUCTURAL EROSION AS REGULATORY MANDATES CUT UTILIZATION, FLEETS BRING SERVICING IN-HOUSE, AND SUSTAINABILITY PRESSURES ACCELERATE ELECTRIFICATION, COMPRESSING THE INDEPENDENT AFTERMARKET FROM EVERY ANGLE.

## Low Retention Rate in the Special Skilled Workforce

- The skilled worker challenge has been a significant issue similar to concerns in the light vehicle aftermarket. This has also been affected by **volatile economic conditions**, where **operational expenses rise** significantly, impacting the profitability of businesses and their ability to retain valuable service employees. These employees may choose to shift to other occupations offering higher pay.

## Regulatory Pressure Reshaping Operations

- Tractors represent a critical segment of Turkiye's heavy-duty vehicle parc, driven by **strong road freight potential** with Europe, where cross-border routes allow higher load capacities up to the **40-ton limit** enforced on Turkish roads.
- **Trip frequency** on these corridors **has fallen** in the recent years, monthly round trips have dropped from 2–3 down to 1, largely due to digital **tachograph mandates**, which has consequently reduced annual kilometrage and aftermarket service demand per vehicle.

## Sustainability Becoming a Commercial Imperative

- From 2026 onward, large European manufacturers will be required to report CO<sub>2</sub> offset data, shifting procurement preference toward lower-emission transport partners over pure delivery speed, creating direct pressure on Turkish logistics operators serving EU customers.
- EV truck pilots are initiated with 4 trucks from **Mercedes Benz and Volvo** are ordered in 2025, **Ford Trucks** (a Ford Otosan brand) unveiled the F-Line E, an electric truck in the 19- and 26-tonne class, manufactured in Turkiye and set to launch across major European markets in 2026.

## Preference of In-house Services & Connectivity

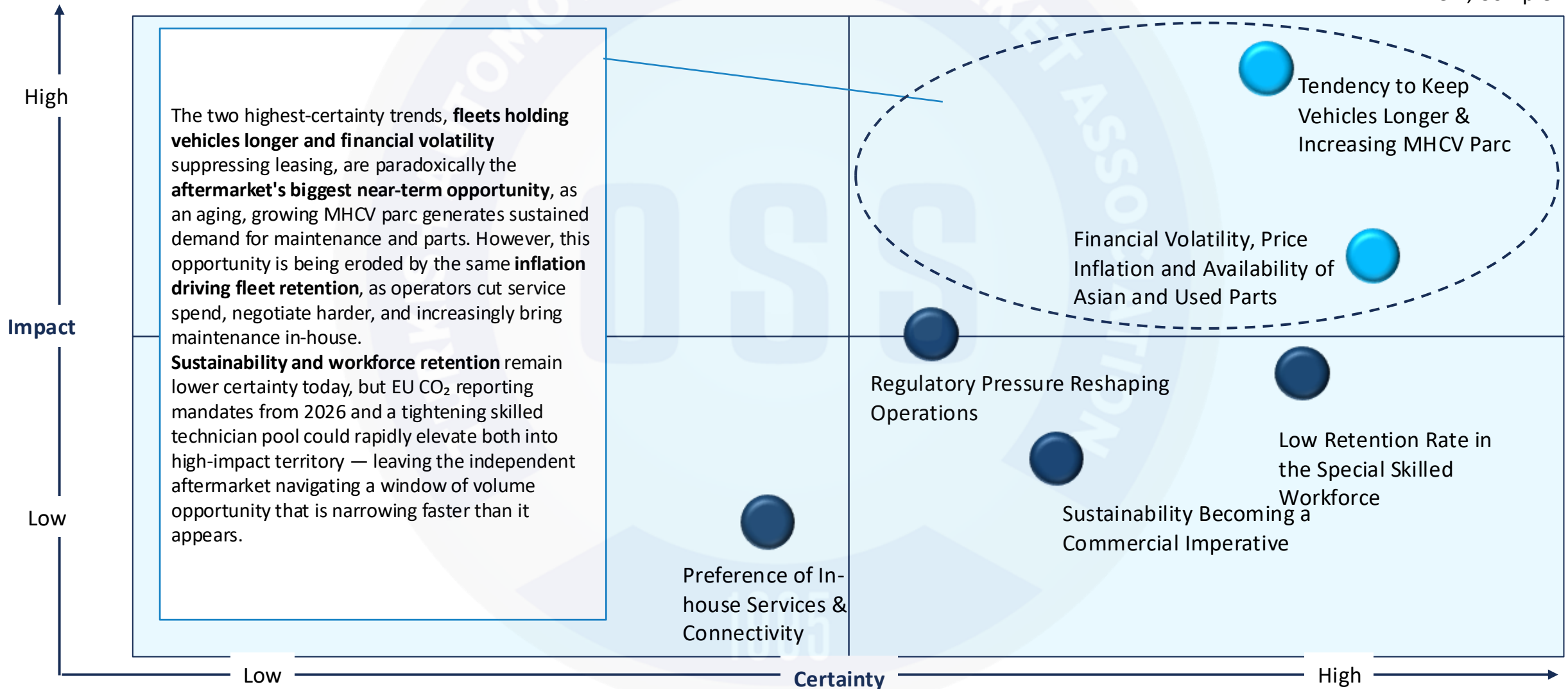
- Major fleets like Ekol, Mars, and Omsan run their **own service centers** or lock in **third-party workshops** through fixed-price agreements for routine maintenance and repairs.
- Connectivity efforts, especially in tracking vehicles are increasing significantly allowing predictive maintenance measures.
- Inflation and rising raw material costs are forcing these agreements to be renegotiated every 3 to 4 months, eroding pricing stability for service providers.
- Vehicles are typically serviced in-house for up to 10 years, then sold into the local transport market, shifting aftermarket demand toward smaller independent operators.

# MAJOR TRENDS IMPACTING TURKISH AFTERMARKET (3/3)

WHILE AN AGING MHCV PARC CREATES A NEAR-TERM AFTERMARKET OPPORTUNITY, INFLATION, IN-HOUSE SERVICING, AND ACCELERATING REGULATORY COMPLEXITY ARE ERODING THE ABILITY OF INDEPENDENT PLAYERS TO CAPTURE IT.

Automotive Aftermarket: Major Trends, Turkiye, 2025

New, Complex



Source: Frost & Sullivan Analysis

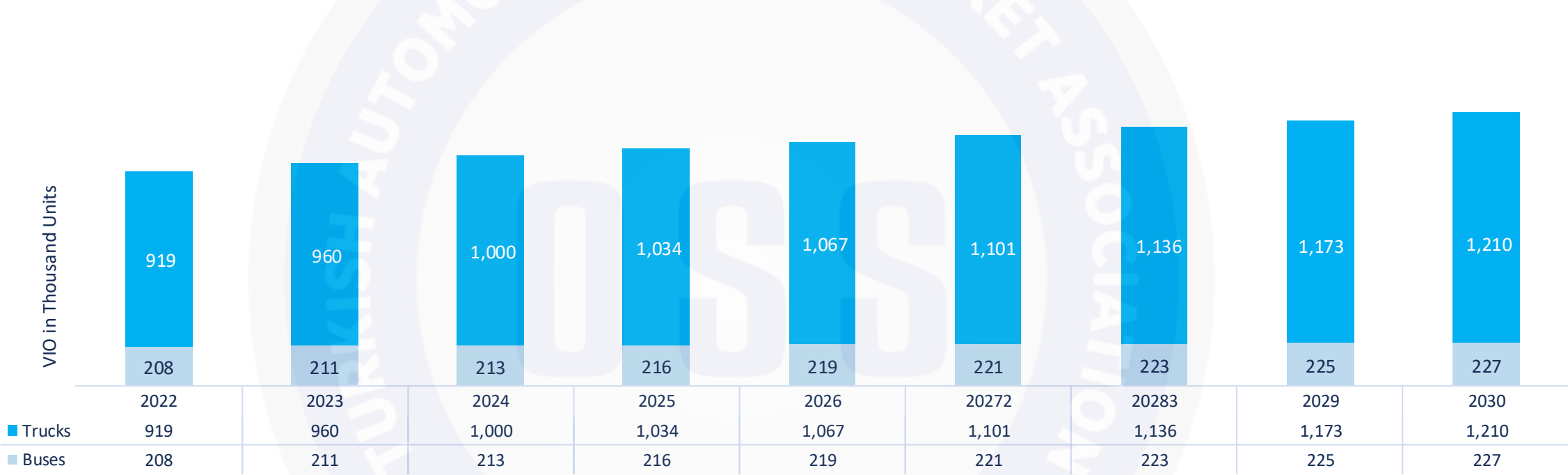


# VEHICLES IN OPERATION (PARC) ANALYSIS

# TOTAL VEHICLES IN OPERATION (PARC) BY MODEL YEAR

MHCV VEHICLE PARC REACHED TO 1.3 MILLION VEHICLES IN 2025, WITH TRUCKS ARE EXPECTED TO GROW AT A 3.2% RATE BY 2030 WHILE BUS PARC GROWTH IS EXPECTED TO BE AROUND 1% CONSERVATIVE RATES.

Automotive Aftermarket: Vehicles in Operation by Type, Turkiye, 2022–2030



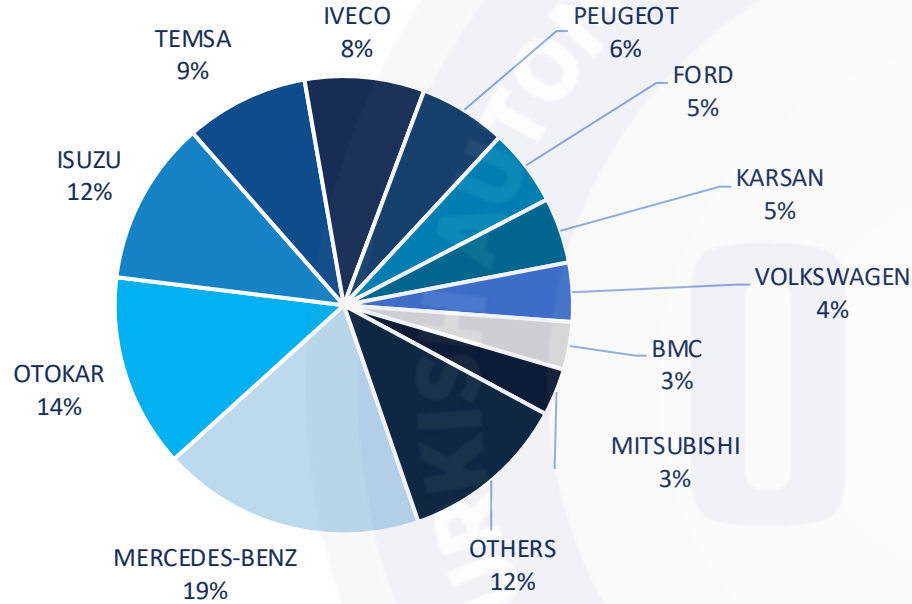
- By the end of 2025, about 1.3 million vehicles are there for trucks (road tractor, dumper truck, tanker, garbage truck are included) and buses in total
  - 1.0% CAGR growth is expected between 2025 and 2030 for buses.
  - 3.2% CAGR growth is expected between 2025 and 2030 for trucks.

Tankers and tractors are listed under trucks in the above TUIK data, semi-trailers are not part of the scope of this study.

# TOTAL VEHICLES IN OPERATION (PARC) BY BRAND

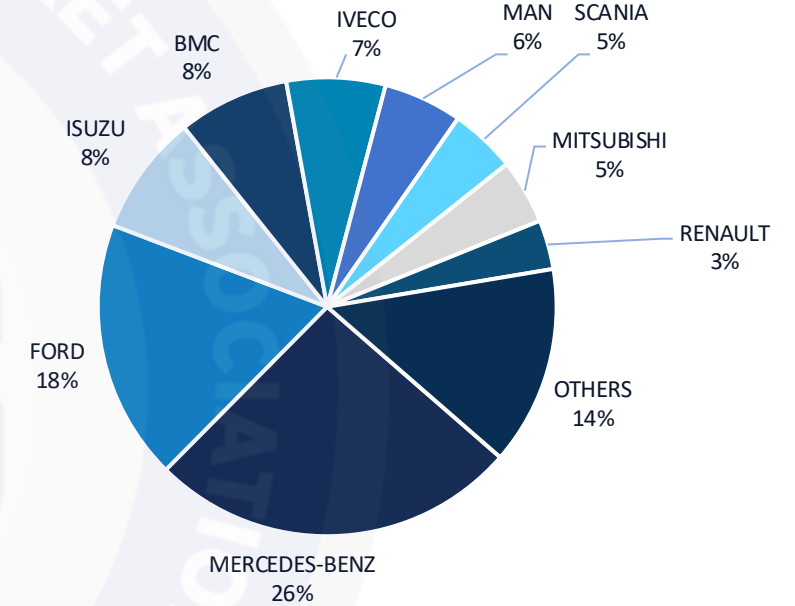
MERCEDES BENZ, FORD, ISUZU AND OTOKAR ARE THE MOST COMMON BRANDS IN THE MHCV SEGMENT IN 2025.

Automotive Aftermarket: Number of Buses in VIO (Parc) by Brand, 2025



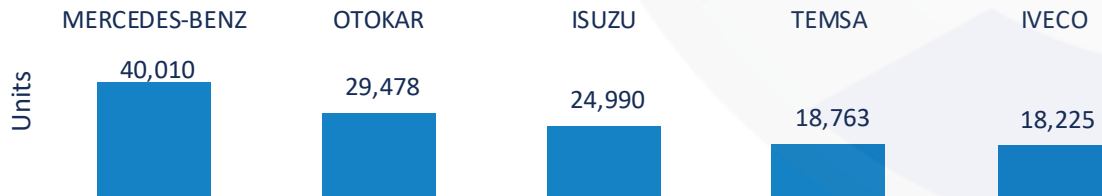
Others include: Setra, Magirus

Automotive Aftermarket: Number of Trucks in VIO (Parc) by Brand, 2025



Others include: DAF, Fargo, Fiat, Dodge, Hino

Automotive Aftermarket: Buses in VIO by Brand, 2025



Automotive Aftermarket: Trucks in VIO by Brand, 2025

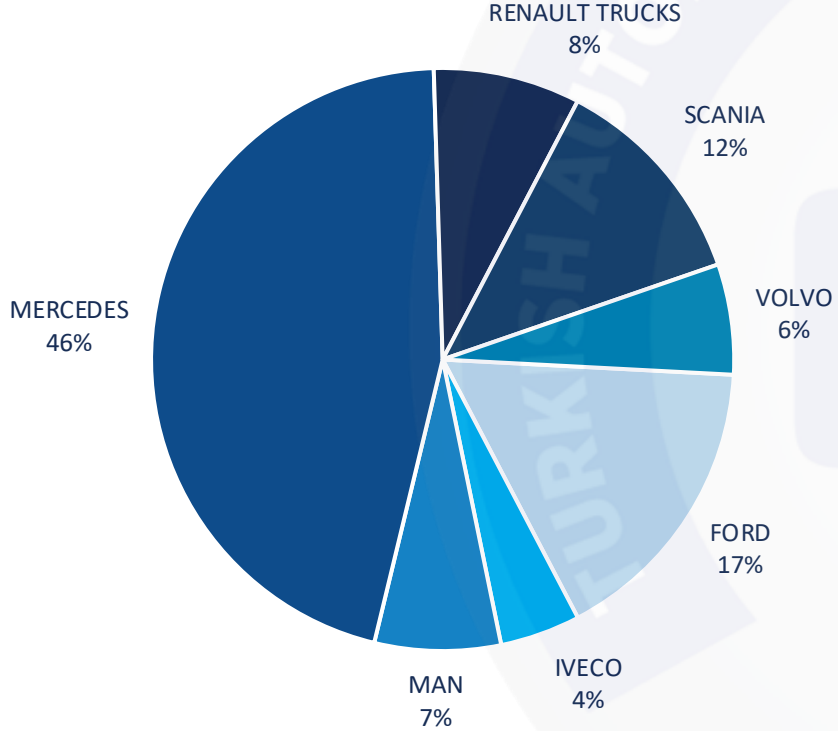


Source: TUIK (Turkish Statistical Institute), TAID, Frost & Sullivan Analysis

# TOTAL VEHICLES IN OPERATION (PARC) BY BRAND IN THE LAST 14 YEARS

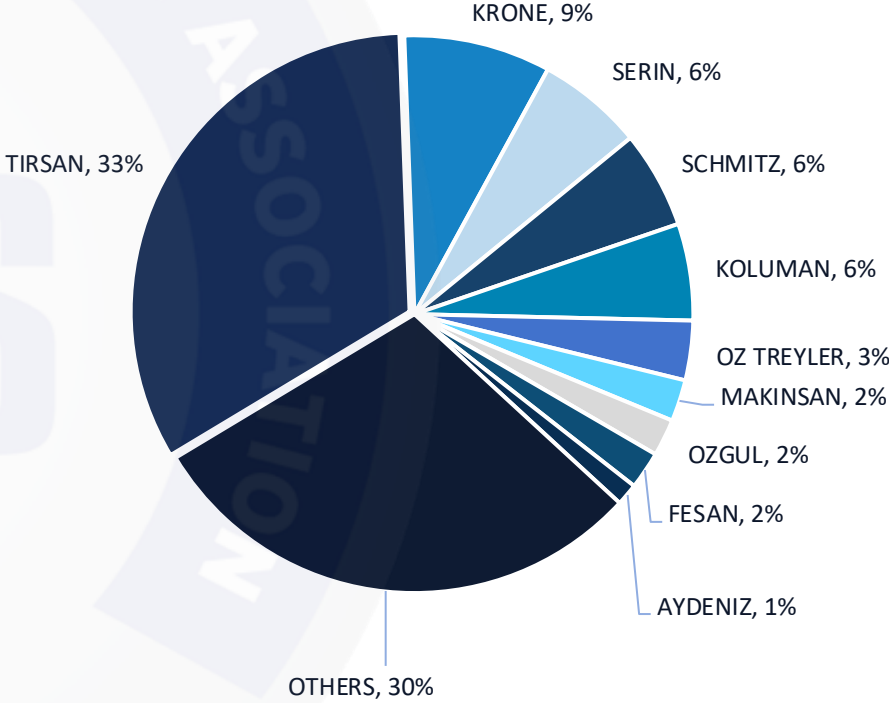
TRACTOR PARC IS HEAVILY INVOLVES MERCEDES, FORD AND SCANIA WHILE TRAILER PARC IS MAINLY TIRSAN FOLLOWED BY KRONE AND SERIN.

Automotive Aftermarket: Number of Road Tractors in VIO (Parc) by Brand, 2011-2025



VIO by brand is calculated from TAID new vehicle registrations each year starting from year 2011.

Automotive Aftermarket: Number of Trailers in VIO (Parc) by Brand, 2011 - 2025

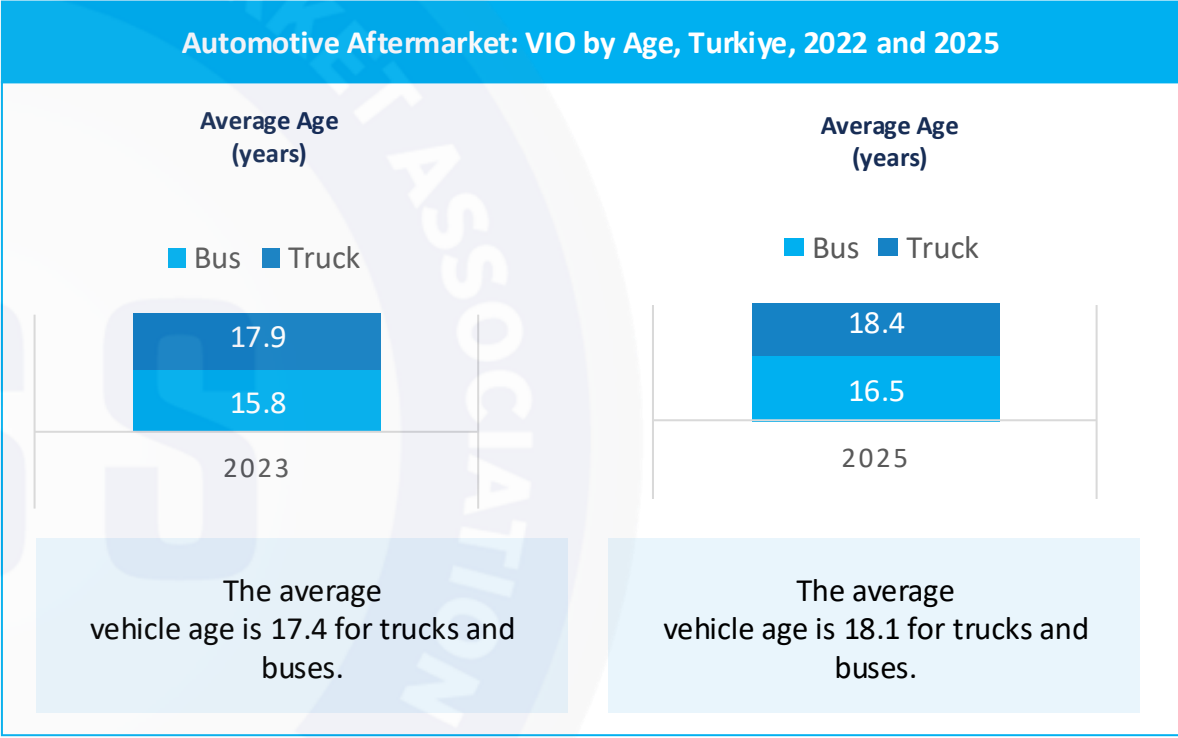
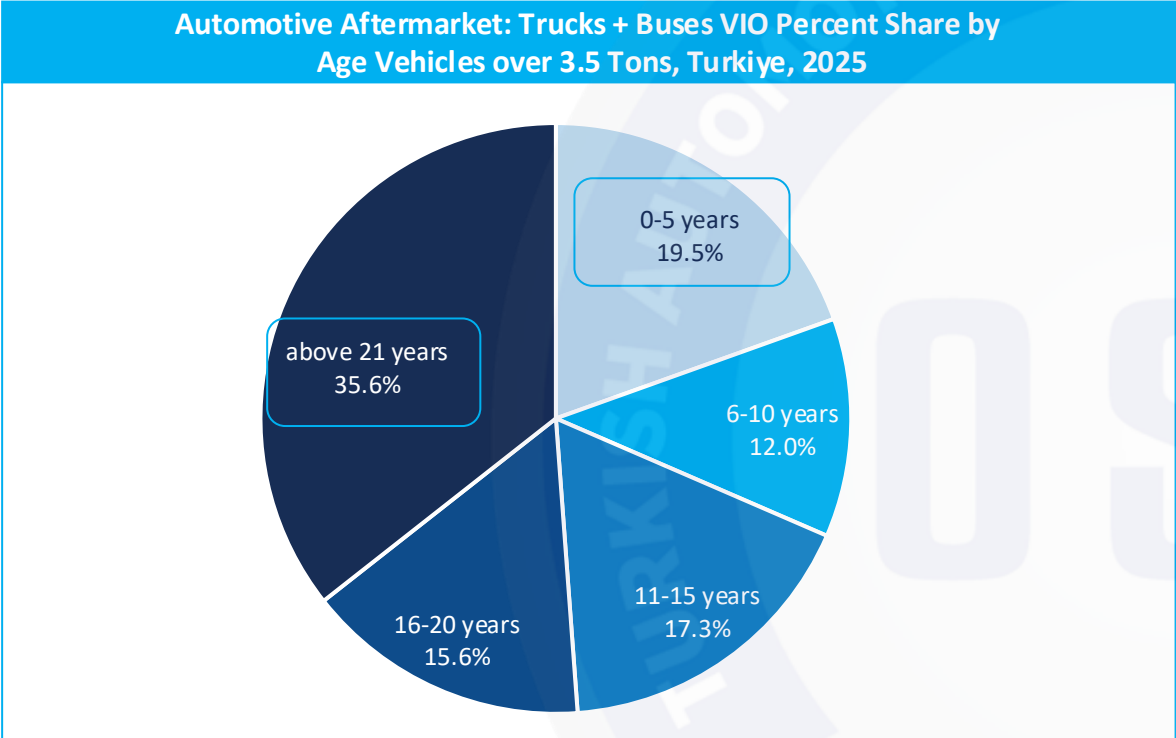


Semi trailers are out of scope of this study

VIO by brand is calculated from TREYDER and TAIDnew vehicle each year starting from year 2011.

# TOTAL VEHICLES IN OPERATION (PARC) BY AGE 2025

TURKIYE'S MHCV PARC IS BOTH POLARIZED AND AGING, STRENGTHENING A DUAL-SPEED AFTERMARKET SPLIT BETWEEN OE SERVICING FOR NEWER VEHICLES AND INDEPENDENT SERVICES FOR OLDER ONES.



- As of 2025, vehicles aged 0–5 years and those over 21 years together account for slightly more than 50% of the MHCV parc in Turkiye. This split creates a distinct aftermarket dynamic, where newer vehicles are more likely to rely on OE servicing, vehicles is handled by independent service providers are considerably older.
- Both trucks and buses average age increased in 2025 compared with 2022: buses from 15.4 to 16.5, trucks from 17.8 to 18.4 due to increase in vehicle prices. Hence the overall MHCV average age is also increased from 17.4 to 18.1.

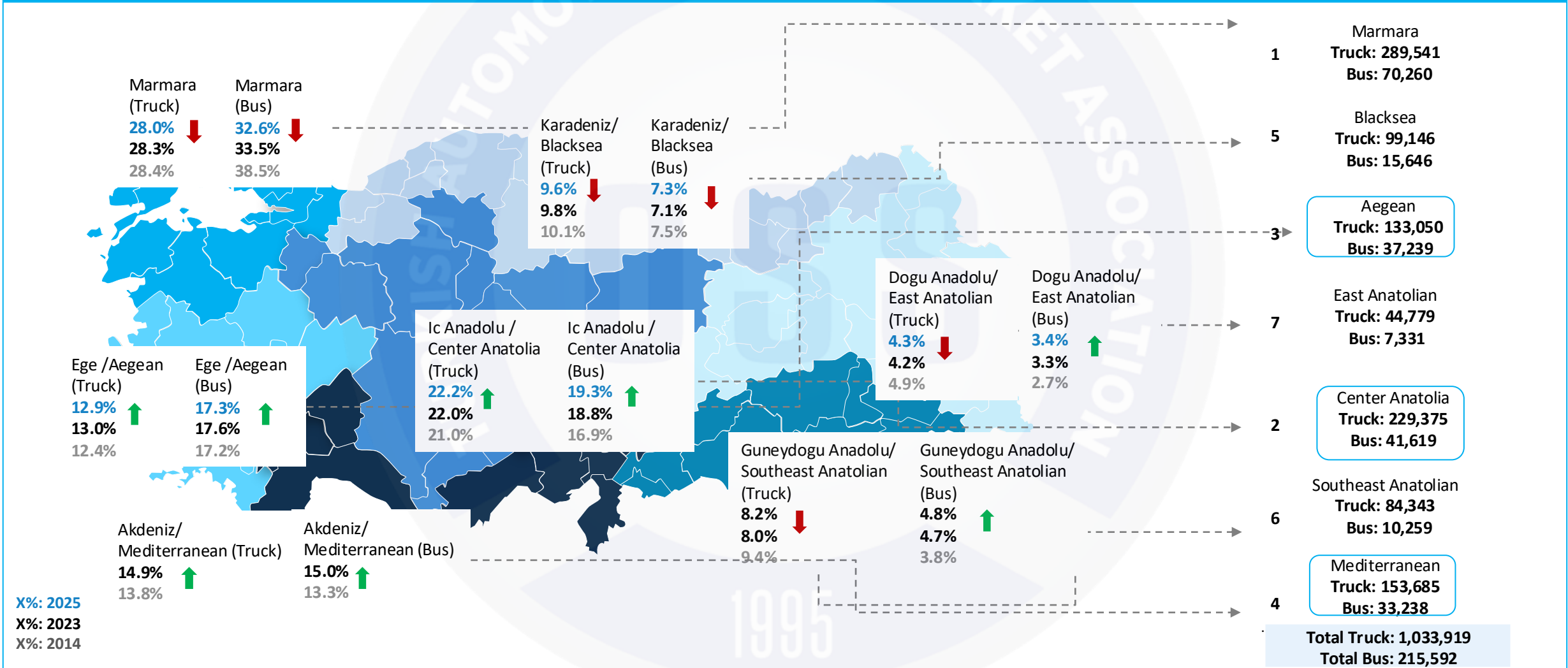
Note: \*Scrap age scheme is the encouragement of Turkish citizens to purchase a new car or van and scrap an old one.

Source: TUIK (Turkish Statistical Institute), Frost & Sullivan Analysis

# VIO BY REGION

TRUCK PARC PERCENTAGE IS INCREASED AEGEAN, MEDITERRANEAN AND CENTER ANATOLIA WHILE FOR BUSES SHARE HAVE GROWN EXCEPT MARMARA AND BLACKSEA REGIONS.

Automotive Aftermarket: VIO by Region, Turkiye, 2025



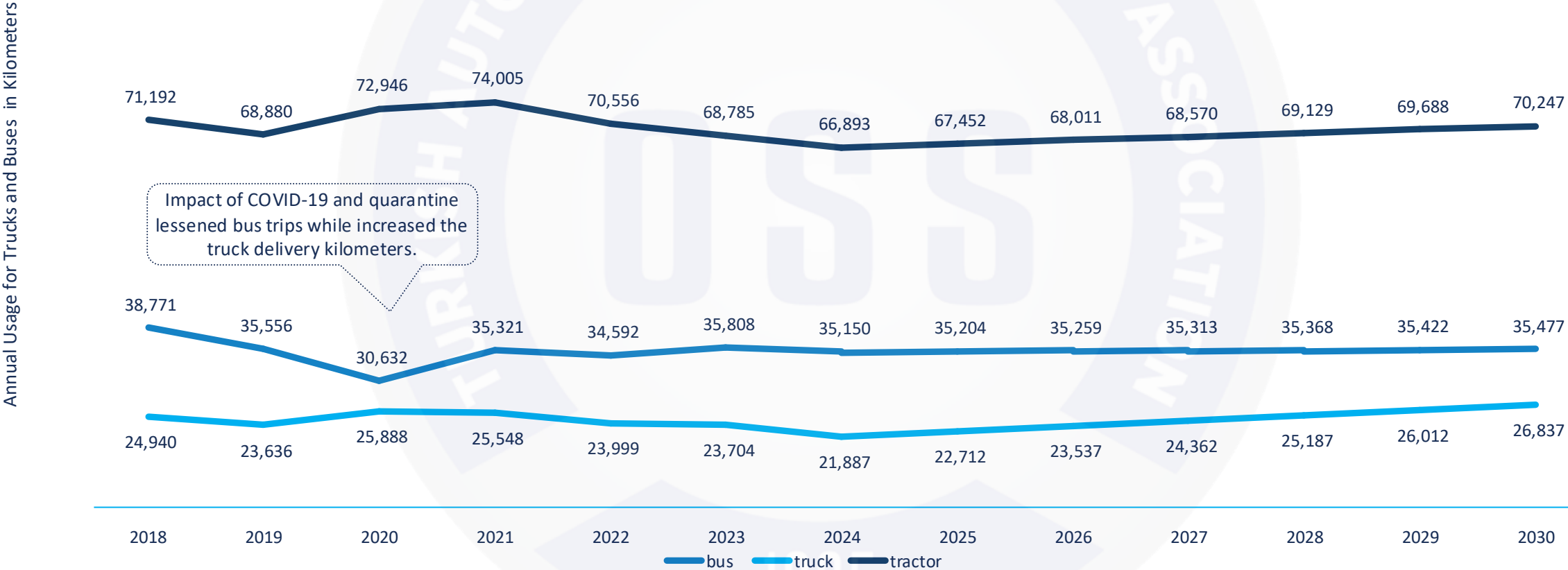
X%: 2025  
X%: 2023  
X%: 2014

Source: TUIK (Turkish Statistical Institute), Frost & Sullivan Analysis

# AVERAGE KILOMETER DRIVEN

TRACTORS FORM THE BACKBONE OF LOAD-CARRYING VEHICLES, AVERAGING AROUND 70,000 KM ANNUALLY, WHILE BUSES TYPICALLY OPERATE AT ABOUT 35,000 KM.

Automotive Aftermarket: Average Kilometer Driven by Bus and Trucks, Turkiye, 2015–2030

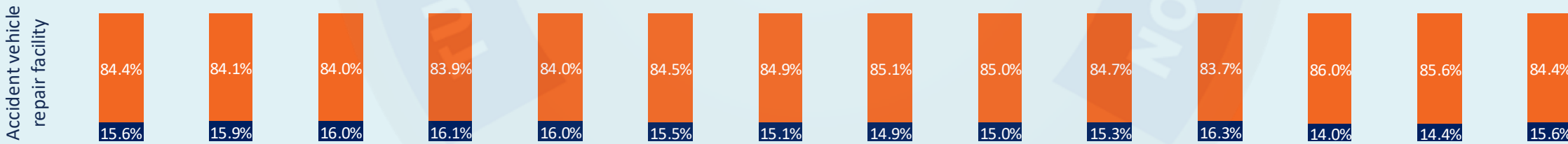
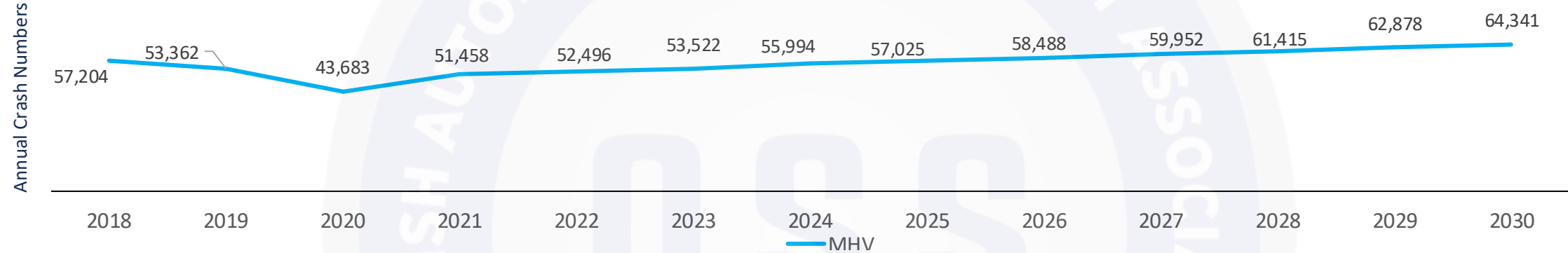


These figures are gathered from the TUIK/ Traffic Highway Ministry's official data with 2024 is the most recent official data.

# ANNUAL CRASH NUMBERS & REPAIR LOCATION

AS OF 2025, THE MHCV SEGMENT IS ESTIMATED TO ACCOUNT FOR APPROXIMATELY 57,000 ACCIDENTS, REPRESENTING AROUND 5% OF THE TOTAL VEHICLE PARC.

Automotive Aftermarket: Annual Crash Numbers vs. Repair facility, Turkiye, 2018–2030



Source: Frost & Sullivan Analysis

■ OES ■ IAM

The accidents that are not reported to insurance companies are not included

Source: TUIK (Turkish Statistical Institute), Frost & Sullivan Analysis



# AFTERMARKET PARTS MARKET ANALYSIS

# TOTAL TURKISH AUTOMOTIVE AFTERMARKET—MANUFACTURER-LEVEL REPLACEMENT PARTS REVENUE (1/2)

THE MHCV REVENUE REACHED \$2.7 BILLION IN 2025 AND EXPECTED TO GROW AT A 4.6% DUE TO INCREASING PARC AND EXPECTED PRICE INFLATIONS.

**Automotive Aftermarket: Medium and Heavy Commercial Vehicles Revenue by Category, Turkiye, 2023–2030**

	2023 Revenue (\$ Million)	2025 Revenue (\$ Million)	2030 Revenue (\$ Million)	CAGR (2025–2030)
Tires	\$625.2	\$706.0	\$910.5	5.2%
Batteries	\$111.1	\$125.1	\$161.0	5.2%
Oil	\$303.9	\$332.0	\$388.4	3.2%
Brake Parts	\$149.1	\$167.7	\$214.6	5.1%
Filters	\$174.5	\$191.0	\$224.7	3.3%
Collision Body	\$155.7	\$176.8	\$231.6	5.5%
Starters and Alternators	\$63.7	\$68.3	\$76.4	2.3%
Lighting	\$70.4	\$79.9	\$105.5	5.7%
Engine Components	\$126.8	\$140.7	\$172.6	4.2%
Transmission Components	\$82.0	\$92.7	\$118.7	5.1%
Cooling system	\$20.8	\$23.4	\$29.8	5.0%
Wheel Bearing	\$33.6	\$37.8	\$48.1	5.0%
Steering and Suspension	\$147.5	\$167.9	\$221.0	5.7%
Shaft	\$20.8	\$23.3	\$29.5	4.8%
Others	\$296.5	\$328.4	\$405.6	4.3%
<b>Total</b>	<b>\$2,381.6</b>	<b>\$2,660.8</b>	<b>\$3,337.7</b>	<b>4.6%</b>

- At a 4.6% CAGR, the Türkiye MHCV aftermarket adds approximately \$677 million in incremental annual revenue between 2025 and 2030 growth that is structural rather than cyclical, anchored in expanding vehicle parc, aging fleet, and increasing part complexity. Truck parc to be estimated to grow at a 3.2% and bus to be 1.0% followed by a balance of slightly decreasing replacement cycles versus increasing price points because of developing technologies in brakes, tires, collision body, transmission along with inflation.
- Tires (26% share), Oil & Fluids (12%), and Others (12%) dominate the market; Lighting is gaining share, lifted by ADAS repair complexity and LED fleet conversion.
- Categories with direct exposure to bus electrification Starters & Alternators (3.2%), Oil & Fluids (4.2%) and Filters (4.3%) grow below the market rate as the EV and CNG bus share rises from 2% to approximately 16% by 2030, reducing ICE-specific replacement demand.

These figures include both OES and independent channel parts revenues, based on retail (end-customer) prices and excluding service fees.

Source: Frost & Sullivan Analysis

# REPLACEMENT RATE OF PARTS IN TURKISH AFTERMARKET

THE 2025 TURKISH MHCV AFTERMARKET IS TRANSITIONING FROM A MAINTENANCE-FREQUENCY MODEL TO A MAINTENANCE-VALUE MODEL.

Fixed Maintenance and Inspection

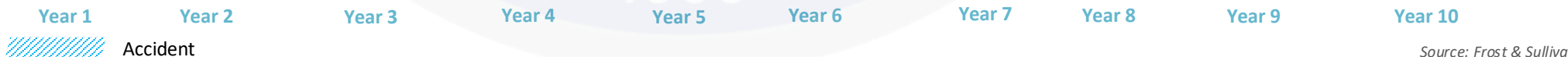
1<sup>st</sup> Periodic Maintenance  
60-150,000 km  
2<sup>nd</sup> Periodic Maintenance  
120-300,000 km  
3<sup>rd</sup> Periodic Maintenance  
180-450,000 km

Adhoc Maintenance and Repair

TUV Inspection Year 1, TUV Inspection Year 2, TUV Inspection Year 3, TUV Inspection Year 4, TUV Inspection Year 5, TUV Inspection Year 6

- Tires
- Batteries
- Oil
- Brake Parts
- Filters
- Collision Body
- Starters and Altermators
- Lighting
- Engine Components
- Transmission Components
- Cooling system
- Steering and Suspension

Mandatory winter tire regulation + 3-4 years wear & tear  
110 - 160,000 km  
25 - 45,000 km  
55- 105,000 km  
15 - 40,000 km  
Accident + damage, weather conditions  
150-400,000 km  
Shift toward LED, fewer replacements with higher ASP  
Year 7+ better engine durability with more expensive failures (DPF, SCR, EGR)  
Year 5+, higher value repairs due to AMT adoption  
Accident + wear & tear, AdBlue increase.  
Wear & tear due to road conditions and load if truck



Source: Frost & Sullivan Analysis

# REPLACEMENT DRIVERS BY VEHICLE APPLICATIONS

VEHICLE DUTY CYCLE REMAINS THE PRIMARY DETERMINANT OF AFTERMARKET DEMAND, WHILE FLEET AGING, EURO VI TECHNOLOGIES AND INCREASING VEHICLE COMPLEXITY ARE RESHAPING REPLACEMENT PATTERNS ACROSS CONSTRUCTION, LONG-HAUL AND BUS SEGMENTS.



## Construction Vehicles

Highest mechanical stress and suspension wear

Frequent start stop operation

Rough terrain, quarry and construction-site usage

Heavy payloads and high driveline loads

- Aging fleet (>18 years average MHCV age) increasing demand for heavy mechanical repairs
- Limited impact from electrification

### Highest replacement demand:

- Suspension & Steering
- Tires
- Transmission Components
- Driveline & Axles
- Brake Parts



## Long Haul Vehicles

Highest annual mileage and maintenance intensity

Long-distance freight transport

High annual mileage

Extended engine operating hours

- Euro VI engines extending service intervals
- Telematics enabling predictive maintenance
- AMT transmissions increasing repair values
- DPF/SCR/AdBlue systems becoming major aftermarket value pools

### Highest replacement demand:

- Tires
- Oil & Fluids
- Filters
- Brake Parts
- Cooling Systems



## Buses

Urban duty cycles create high brake and suspension wear

Frequent stop-start cycles

Dense urban routes

Passenger comfort requirements

- Early EV adoption concentrated in municipal fleets
- Lower demand for engine-related consumables over time
- Growing importance of electrical and thermal management systems

### Highest replacement demand:

- Brake Parts
- Suspension & Steering
- Tires
- Lighting
- HVAC / Cooling Systems

# TOP PARTS/ SYSTEM SUPPLIERS IN TURKIYE

TURKIYE'S MHCV AFTERMARKET COMBINES STRONG LOCAL MANUFACTURING CAPABILITIES WITH GLOBAL TECHNOLOGY LEADERS, CREATING A HIGHLY COMPETITIVE SUPPLY ECOSYSTEM ACROSS MAJOR PRODUCT CATEGORIES.

Tires	Batteries	Oil	Brake Parts	Filters	Starters and Alternators	Lighting	Wheel Bearing	Cooling system	Engine	Transmission	Steering and Suspension	Shafts
Brisa	Esan	BP Castrol	Beser Balata	Asas	Bosch	Ayfar	NTN-SNR	Kale	Borgwarner	Donmez	ACV	Meritor
Continental	Inci	Opet Fuchs	Eku Fren	Fil	Lucas Elektrik	Depo	Schaeffler	Mahle	Cummins	Kacmazlar	Ditas	Tirsan
Goodyear	Mutlu	Petrol Ofisi	Eren	Hengst	Mahle	Hella	SKF	Nissens	Federal Mogul	Schaeffler	Maysan Mando	
Hankook	Varta	Shell	Ferodo	Mahle	Valeo	Osram	Timken		Garrett	Valeo	Monroe	
Petlas	Yigit	Total	Knorr-Bremse	Mann		Valeo			Mahle	ZF	Vibracoustic	
Pirelli			Textar	Racor/Parker					KS		ZF/ Sachs/ Lemforder	
Michelin				Sampiyon								

Suppliers are listed alphabetically.

Source: Frost & Sullivan Analysis



# AFTERMARKET SERVICE ANALYSIS

# TURKISH AUTOMOTIVE AFTERMARKET SERVICES INDUSTRY

INDEPENDENT GARAGES FORM THE BACKBONE OF THE MEDIUM AND HEAVY DUTY AFTERMARKET INDUSTRY IN TURKIYE, PROVIDING THE MAJORITY OF ACCESSIBLE, COST-EFFECTIVE REPAIR AND MAINTENANCE SERVICES ACROSS THE COUNTRY'S COMMERCIAL VEHICLE PARC.

Five groups of aftermarket services operate on the independent side, alongside OE-authorized partners and franchise networks. By 2025, fleet digitalization and e-commerce parts platforms are reshaping purchasing behaviour across all five segments.

<b>Independent Service Partners</b>	For MHCV mechanical parts, OEMs (Mercedes-Benz Türk, MAN, Volvo, DAF) maintain authorised independent service networks across Turkiye. Partners use genuine/OE-equivalent parts with warranty coverage. Misuse of OE logos by non-affiliated shops remains widespread, leading to buyer confusion. Multi-brand service agreements are common; some partners hold agreements with 3–4 OEMs simultaneously. Digital diagnostic tools (TEXA, Bosch KTS) are increasingly required for admittance to OEM partner programmes.
<b>Specialized Workshops</b>	Specialized workshops focus on high-value repair and remanufacturing of engines, transmissions, axles, and steering systems. They are predominantly located within Oto Sanayi zones — dedicated auto service districts present in almost every city across Turkiye providing accessible coverage for both local and long-haul operators. OE service networks also collaborate with these centers when specialized component repairs fall outside their own scope, referring vehicles for expert intervention on specific parts.
<b>Individual Service Centers</b>	With the average MHCV parc age now exceeding 18 years (up from ~17 in 2023), independent garages handle the bulk of wear-and-tear maintenance brakes, clutch, suspension, cooling systems. Cost sensitivity is the primary driver: labour rates 30–50% below authorised networks. The independent garage network ensures nationwide accessibility, though parts quality variance and technician skills gap remain structural concerns heading into 2025.
<b>Franchise Workshops</b>	Franchise service networks (Bosch Service, Castrol Servis, Mann-Filter Service Point) are gaining MHCV traction as fleet operators seek standardised service records for resale value and insurance. Still a small share of the independent aftermarket, but growing, particularly in logistics hubs (Gebze, Esenyurt, Hadımköy). Insurance companies are increasingly directing MHCV repair work toward certified franchise networks with fixed labour rate agreements.
<b>In-house Service Facilities</b>	Large logistics operators (PTT Kargo, Horoz, MNG Kargo, UPS Turkiye) and municipal bus fleets run dedicated in-house maintenance bays. Core services cover oil/filter changes, tyre management, brake servicing and light body repairs. By 2025, fleet telematics integration (Webfleet, Geotab, local providers) increasingly triggers proactive maintenance schedules, reducing unplanned downtime. An estimated 30–40% of MRO* transactions in large fleets are now initiated digitally or telematics-triggered.

MRO\*: Maintenance, repair, overhaul

Source: Frost & Sullivan Analysis

# SERVICE CENTERS BY TYPE

TURKIYE'S MHCV AFTERMARKET REMAINS HIGHLY FRAGMENTED, BUT RISING VEHICLE COMPLEXITY IS GRADUALLY SHIFTING REPAIR ACTIVITY TOWARD LARGER, BETTER-EQUIPPED AUTHORIZED AND SPECIALIZED SERVICE NETWORKS.

Automotive Aftermarket: Service Centers by Type, Turkiye, 2023, 2025 and 2030

Repair Location	2023 Locations	2025 Locations	2030 Locations
Vehicle Dealers	Approx. 350	Approx. 426	Approx. 488
Individual Service Centers	Approx. 4,600	Approx. 4,900	Approx. 5,120
Authorized Damage Repair Centers	Approx. 860	Approx. 872	Approx. 908

- Independent workshops remain the dominant service channel, accounting for over 80% of repair locations, supported by Turkiye's aging commercial vehicle fleet and strong price sensitivity among operators.
- Authorized dealer networks continue to expand (+2.4% CAGR, 2023–2030), driven by increasing vehicle complexity, digital diagnostics requirements, and demand for warranty-compliant servicing.
- Damage repair facilities are expected to grow modestly from 860 locations in 2023 to over 900 by 2030, supported by rising commercial vehicle accident volumes and increasing repair complexity associated with modern vehicle systems.
- Despite network expansion, aftermarket value growth is expected to outpace service center growth as higher-value repairs, advanced powertrain technologies, and electronic systems increase revenue per repair event.

Automotive Aftermarket: Number of Damage Repair Facilities, Turkiye, 2018-2030

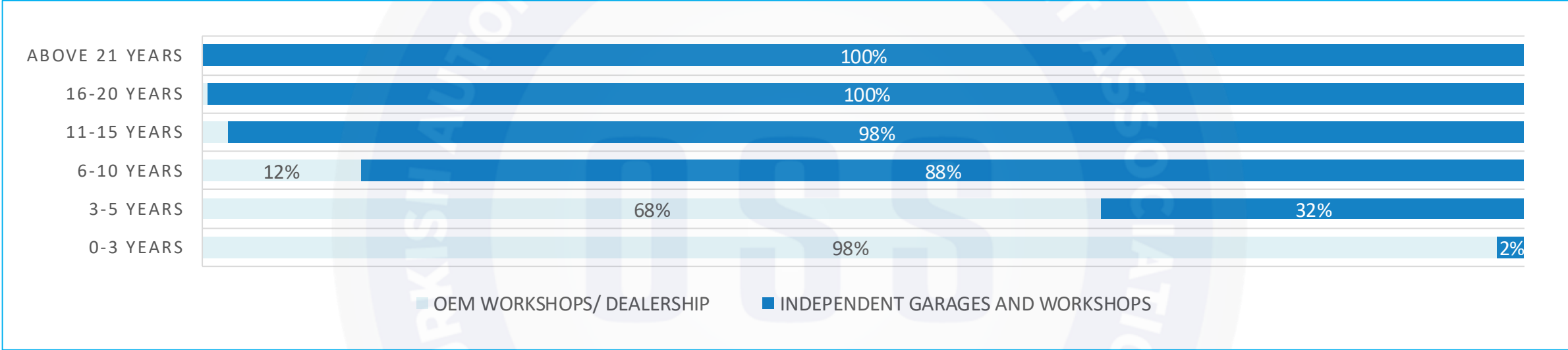


Source: OYDER, Frost & Sullivan Analysis

# COMPETITIVE EVALUATION OF THE SERVICE INDUSTRY

THE TURKISH MHCV SERVICE MARKET IS BECOMING INCREASINGLY POLARIZED: OE NETWORKS RETAIN DOMINANCE DURING WARRANTY YEARS, THE 3–5 YEAR VEHICLE COHORT IS EMERGING AS THE MOST COMPETITIVE BATTLEGROUND BETWEEN OES AND IAM CHANNELS.

Automotive Aftermarket: Service Channel Preference by Vehicle Age, Turkiye, 2025



**Warranty Period Continues to Protect Early-Life Vehicles**

- Most truck and bus OEMs continue to offer warranties ranging from **2–5 years**, preserving strong OE workshop penetration during the vehicle's early operating life.
- Increasing vehicle complexity, connected diagnostics, ADAS calibration requirements and emissions systems further reinforce OE servicing during the warranty period.

**Independent Networks Capture the Post-Warranty Fleet**

- Once warranty coverage expires, operators increasingly prioritize total operating cost, driving a rapid shift toward IAM workshops.

**Inflation Accelerates Service Migration**

- Rising labor costs and spare parts inflation have widened the cost differential between OE and IAM workshops.
- Fleet operators are increasingly reserving OE workshops for complex repairs while directing routine maintenance and wear-and-tear replacements to independent providers.

**Insurance and Collision Repairs Favor IAM Networks**

- Most accident repairs continue to be routed through insurer-approved repair networks, supporting high IAM participation in body, paint and collision-related services.
- Growing accident volumes and increasing repair complexity are benefiting larger multi-service repair centers with diagnostic and calibration capabilities.

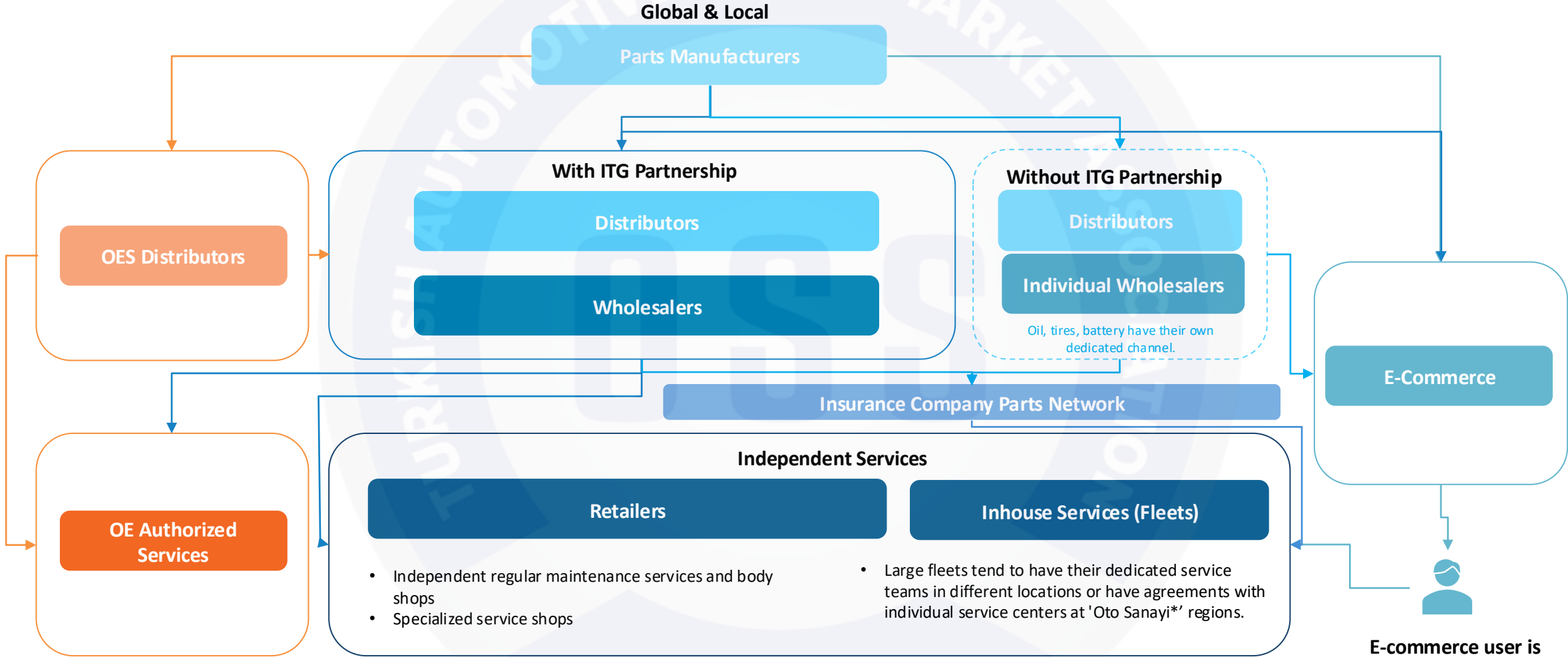
Source: Frost & Sullivan Analysis



# DISTRIBUTION CHANNEL ANALYSIS

# TURKISH AFTERMARKET DISTRIBUTION STRUCTURE

THE MHCV AFTERMARKET DISTRIBUTION CHANNEL IS MORE CONSOLIDATED COMPARED TO LIGHT VEHICLES SEGMENT.



These individual wholesalers only exist in areas with low population and east side of the country

The number of parts distributors without the ITG partnership in Turkey is diminishing significantly



End User

Oto Sanayi\*: These are areas where multiple vehicle repair facilities are located together.

E-commerce user is generally the master or the technician

Source: Frost & Sullivan Analysis

# TOP TURKISH AFTERMARKET PARTS INTERNATIONAL TRADING GROUPS

FIVE ITG'S COVERS MEDIUM AND HEAVY COMMERCIAL VEHICLE DISTRIBUTION NETWORK IN TURKIYE WITH STRONG LOCAL PARTNERS.

## Automotive Aftermarket: International Trading Groups, Turkiye, 2025

International Trading Groups (ITG)	Number of Business Partners in Turkiye	Year of ITG Partnerships in Turkiye	Vehicle Scope	Member Distributors (examples)
<b>AD International / AD Ekol</b>	9 shareholders & 5 members	2017	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>	Ardic, Arici
<b>ATR</b>	2 shareholders	2003, 2018	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>	Martas, Rotas
<b>Groupauto International / Grup Oto</b>	30 business partners (5 of them are MHCVs)	1992	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>	Hamle, Smarttech
<b>Nexus International &amp; Nexus Eurosia</b>	1 shareholder & 2 members	2014	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>	Dinamik, Simpar
<b>Temot / Tatcom</b>	7 shareholders & 3 members	2013	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>	Genel Oto, Hidirusta, Motor Asin

ITG's are listed alphabetically.

Source: Frost & Sullivan Analysis

# TOP TURKISH AFTERMARKET PARTS KEY DISTRIBUTORS

NUMBER OF LOGISTICS CENTERS HAVE SLIGHTLY BEEN INCREASED, DEPICTING A GROWING NEED TOWARD INVENTORY AND LOGISTICS OPERATIONS.

## Automotive Aftermarket: Key Distributors, Turkiye, 2025

Distributor Group	Year of Founding	Number of Logistics Centers 2023	Number of Logistics Centers 2025	International Trading Groups (ITG)	Year of ITG Partnership	Vehicle Scope
Ardic	1975	5	8	AD International / AD Ekol	2019	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Dinamik	1986	18	25	Nexus International & Nexus Eurosia	2014	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Genel Oto	1954	7	8	Temot / Tatcom	2013	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Hamle Otomotiv	1979	3	5	Groupauto International / Grup Oto	2013	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Hidir Usta	1978	8	8	Temot / Tatcom	2013	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Martas	1980	11	11	ATR	2018	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Motor Asin	1971	6	8	Temot / Tatcom	2013	<ul style="list-style-type: none"> <li>• Light vehicles</li> <li>• Commercial vehicles</li> </ul>
Silkar Endas	1965	6	6	Independent	Not applicable	<ul style="list-style-type: none"> <li>• Commercial vehicles</li> </ul>

Distributors are listed alphabetically.

Source: Frost & Sullivan Analysis

# COMPETITIVE EVALUATION OF DISTRIBUTION

COMPETITION IN TURKIYE'S MHCV DISTRIBUTION MARKET IS SHIFTING FROM PRODUCT AVAILABILITY TOWARD LOGISTICS SPEED, DIGITAL INTEGRATION AND TECHNICAL EXPERTISE, WHILE EXPANDING WAREHOUSE NETWORKS CONTINUE TO REDUCE VEHICLE DOWNTIME AND STRENGTHEN NATIONWIDE PARTS ACCESSIBILITY.

## **Distributors are increasingly participating across the entire vehicle ownership cycle**

### Lifecycle

Major aftermarket distributors are expanding beyond traditional parts supply into technical support, workshop partnerships, training, fleet services and authorized dealership operations. As commercial vehicles remain in service for more than 18 years on average, distributors are positioning themselves to capture value from routine maintenance, major repairs and collision-related replacement demand throughout the vehicle lifecycle.

## **Scale and proximity are becoming critical competitive advantages**

### Expansion

Leading distributors continue investing in warehouse expansion, inventory visibility and digital ordering platforms. Companies such as Dinamik, Ardiç, Motor Aşın and Hamle Otomotiv have expanded logistics capacity to strengthen nationwide coverage. Digital catalogues, VIN-based part identification and B2B ordering systems are increasingly becoming standard requirements rather than competitive advantages.

## **Growing vehicle complexity is increasing inventory and technical requirements**

### Diversity

The Turkish MHCV fleet remains highly fragmented across multiple brands, vehicle ages and emission standards. While diesel vehicles continue to dominate, Euro VI technologies, advanced braking systems, telematics and connected vehicle platforms are increasing product variety and technical complexity. Distributors increasingly compete on technical support, training and inventory breadth rather than solely on pricing.

## **Fleet decarbonization and EU regulations are shaping distributor strategies**

### Sustainability

Sustainability is becoming an important consideration across the commercial vehicle value chain, particularly for fleets serving European customers. Increasing ESG reporting requirements and carbon reduction initiatives are driving demand for lower-emission vehicles, remanufactured components and circular economy solutions. While EV penetration remains negligible in the Turkish MHCV parc, distributors are gradually preparing for future demand related to electrified commercial vehicles and advanced thermal management systems.



# OES CHANNEL ANALYSIS

# OES CHANNEL TRENDS

OES NETWORKS CONTINUE TO DOMINATE WARRANTY-RELATED SERVICING WHILE INCREASING VEHICLE COMPLEXITY, DIAGNOSTICS REQUIREMENTS AND CONNECTED SYSTEMS SUPPORT THEIR POSITION BEYOND THE TRADITIONAL WARRANTY PERIOD.

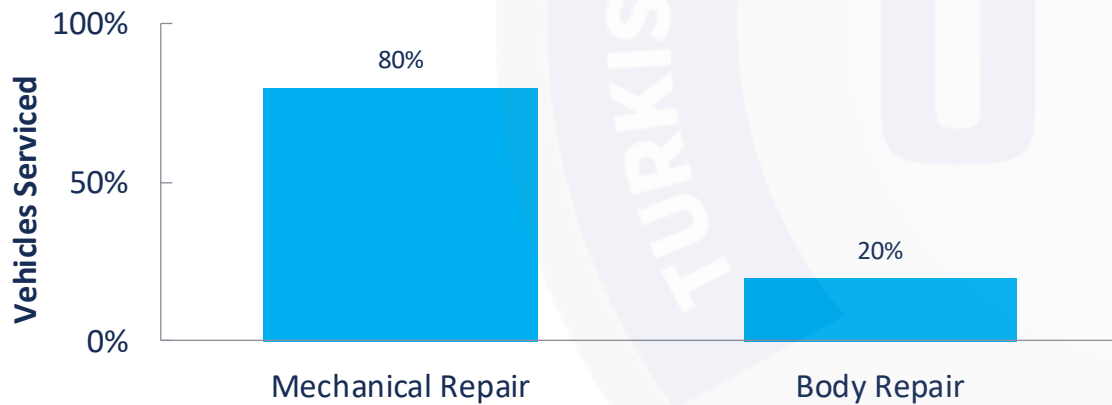
## Warranty Retention Remains Strong

- Commercial vehicle OEMs continue to retain the vast majority of vehicles during the warranty period through authorized service networks and bundled maintenance programs.
- Advanced vehicle systems including Euro VI emissions technologies, ADAS functions, telematics and automated transmissions are strengthening the role of OES workshops in complex repair activities.

## Independent Competition Is Increasing

- Independent commercial vehicle workshops continue to improve technical capabilities through investments in diagnostics, technician training and access to OE-quality replacement parts. As fleets focus on minimizing downtime and reducing maintenance costs, IAM providers are capturing an increasing share of post-warranty maintenance and repair activities, particularly for vehicles older than five years and uptime considerations.

Automotive Aftermarket: Percent of Vehicles Serviced at OES Channel According to Type of Services Performed, Turkiye, 2025



- Services Typically Retained by OES
- Engine and powertrain repairs
- Euro VI emissions systems (DPF, SCR, AdBlue)
- Automated transmission servicing
- Electronic diagnostics and software updates
- Warranty-related maintenance
- ADAS calibration and safety systems

Automotive Aftermarket: Percent of New Vehicles Serviced According to Type of Channel, Turkiye, 2025



## Key OES Growth Drivers

- Increasing vehicle complexity
- Expansion of software-driven systems
- Growth of automated transmissions
- Chinese OEM dealer network expansion
- Fleet demand for uptime and warranty compliance

## Key OES Challenges

- Rising labor and service costs
- Expanding IAM technical capabilities
- Aging fleet profile (18.1 years average age)
- Growing use of alternative parts channels

Source: Frost & Sullivan Analysis

# NEW CAR WARRANTIES (FROM OEMS)

COMMERCIAL VEHICLE OEMS ARE INCREASINGLY COMPETING ON AFTERSALES CAPABILITIES RATHER THAN VEHICLE SALES ALONE. EXPANDING SERVICE NETWORKS, EXTENDED WARRANTY PROGRAMS, ROADSIDE ASSISTANCE AND UPTIME-FOCUSED SERVICES ARE BECOMING CRITICAL DIFFERENTIATORS.

Company	Example of Regional Authorized Chain Dealers & Services	Number of Dealers 2025	Number of Services 2025	Mobile Service	Manufacturer Warranty Offer
Mercedes	Birollar, Koluman, Mengerler	30	48	✓	1 year, unlimited km. Extendable to 3 years if all maintenance & bodywork carried out at authorized MB services within the first 2 years.
Ford	Atamar, Büyükkarcı, Çetaş, Otokoç	24	24	✓	2 years, unlimited km. Option to extend warranty by one year.
Scania	Doğuş Otomotiv, Tırsan, UCR Otomotiv	15	19	X	1 year. Optional packages (Professional, Professional Extra, Premium, Premium Extra) offer extended engine, transmission & chassis repair coverage.
Renault Trucks	Koçaslanlar, Özmutlubaş, Silahtaroğlu	19	19	X	2 years, unlimited km. 7/24 roadside assistance network across 16 languages.
MAN	Lokman Koçaslan, Mapar, Meçikoğulları	16	34	X	1 year, unlimited km. Chassis parts (engine, driven axles) have 2 years unlimited km warranty under MAN definition.
Iveco	Genpar, Kılıçlar, Öz Gözde	46	54	X	2 years / 200,000 km.
Mitsubishi	İnalılar, Musluoğlu, Şeref Oto, Tekbaş	55	55	X	5 years/100,000 km or 2 years/unlimited km. 12 years anti-perforation warranty.
Otokar	Acamar, Fırat Oto, Somaylar	34	72	X	2 years, unlimited km.
Isuzu	Asal, Çetaş, Öztopraklar	35	35	X	2 years, unlimited km. D-Max: 5 years/100,000 km warranty.
Temsa	Askar, Ataser, Girginler	52	52	X	2 years, unlimited km; extended warranty packages available.

Source: SERBIS, Frost & Sullivan Analysis

# OEM WARRANTY CONDITIONS

THE TURKISH MHCV AFTERMARKET REMAINS LARGELY SHAPED BY TRADITIONAL MANUFACTURER WARRANTIES AND EXPANDING EXTENDED POWERTRAIN COVERAGE PROGRAMS, WHILE EV-RELATED WARRANTY IMPACTS REMAIN MINIMAL

Warranty Type	Coverage	Impact on the Aftermarket
<b>Manufacturer Warranty</b>	<ul style="list-style-type: none"> <li>Covers defects in materials, manufacturing and workmanship, including parts and labor.</li> <li>Typically <b>1–2 years</b>, often with unlimited mileage for trucks and buses.</li> <li>Several OEMs offer extended warranty packages covering engine, transmission and chassis components.</li> </ul>	<ul style="list-style-type: none"> <li>Authorized service networks retain the majority of maintenance and repair activity during the warranty period.</li> <li>Increasing vehicle complexity, including Euro VI emissions systems, telematics and automated transmissions, reinforces OES workshop utilization.</li> <li>Extended warranty programs are becoming an important tool for OEM customer retention.</li> </ul>
<b>Paint Warranty</b>	<ul style="list-style-type: none"> <li>Covers paint defects such as peeling, blistering, cracking and excessive fading caused by manufacturing or application issues.</li> <li>Typically <b>2 years</b>, unlimited mileage.</li> </ul>	<ul style="list-style-type: none"> <li>Paint and cosmetic repairs remain common aftermarket services but are largely excluded from warranty coverage when damage is accident-related.</li> <li>Independent body shops continue to capture most collision-related paint work through insurer networks.</li> </ul>
<b>Anti-Perforation Warranty</b>	<ul style="list-style-type: none"> <li>Covers corrosion-related perforation resulting from manufacturing or material defects.</li> <li>Typically <b>5–12 years</b>, depending on OEM and vehicle type.</li> </ul>	<ul style="list-style-type: none"> <li>Long warranty periods reduce demand for rust-related repairs during the early vehicle life cycle.</li> <li>Aftermarket providers focus on preventative corrosion treatments, underbody protection and refurbishment services for aging fleets.</li> </ul>
<b>Extended Powertrain / Chassis Warranty</b>	<ul style="list-style-type: none"> <li>Optional programs covering major components such as engines, transmissions, driveline systems and axles beyond the standard warranty period.</li> <li>Increasingly offered by major truck OEMs.</li> </ul>	<ul style="list-style-type: none"> <li>Delays migration of high-value repairs to the IAM channel.</li> <li>Supports OES retention beyond the initial 1–2 year warranty window, particularly for large fleet customers.</li> </ul>

# WARRANTIES IN THE AFTERMARKET (CONTINUED)

EXTENDED WARRANTY PROGRAMS ARE BECOMING INCREASINGLY IMPORTANT FOR OEMS AS A CUSTOMER RETENTION TOOL, SHIFTING COMPETITION FROM VEHICLE SALES TOWARD LONG-TERM SERVICE, UPTIME AND MAINTENANCE CONTRACTS.

Warranty Type	Coverage	Impact on the Aftermarket
<b>Extended Service / Powertrain Warranty</b>	<ul style="list-style-type: none"> <li>• Additional coverage beyond the standard manufacturer warranty, typically ranging from <b>1 to 6 years</b> depending on the OEM.</li> <li>• Often focused on high-value components such as engines, transmissions, driveline systems and chassis components.</li> <li>• Examples include MAN programs extending up to <b>72 months or 1 million km</b> and Scania's Professional/Premium packages.</li> </ul>	<ul style="list-style-type: none"> <li>• Increases OEM retention beyond the initial warranty period and delays migration of high-value repairs to IAM channels.</li> <li>• Particularly attractive for large fleets seeking predictable maintenance costs and reduced downtime.</li> <li>• Creates a deferred aftermarket opportunity as vehicles transition to independent workshops after coverage expires.</li> </ul>
<b>Standard Manufacturer Warranty</b>	<ul style="list-style-type: none"> <li>• Typically <b>1–2 years</b>, usually with unlimited mileage for commercial vehicles.</li> <li>• Covers defects in materials, manufacturing and workmanship, including parts and labor.</li> <li>• Forms the foundation of OEM aftersales retention strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• Authorized service networks capture the majority of maintenance and repair activity during the warranty period.</li> <li>• After warranty expiration, operators increasingly shift routine maintenance and wear-and-tear repairs toward IAM providers to reduce operating costs.</li> <li>• The 3–5 year vehicle cohort remains the most competitive period between OES and IAM channels.</li> </ul>



# REGULATORY INFLUENCES

# AUTOMOTIVE AFTERMARKET—KEY REGULATIONS, 2025 (1/2)

TURKIYE'S MHCV REGULATORY FRAMEWORK CONTINUES TO SUPPORT RECURRING AFTERMARKET DEMAND THROUGH MANDATORY INSPECTIONS, WINTER TIRE REQUIREMENTS, INSURANCE OBLIGATIONS AND SAFETY REGULATIONS.

Legislative Topic	Overview	Impact on the Aftermarket
<b>Winter Tire Requirement</b>	<ul style="list-style-type: none"> <li>Winter tires remain mandatory for vehicles transporting passengers and goods on intercity roads between <b>15<sup>th</sup> of November to 15<sup>th</sup> of April</b> extended from 1 December and 1 April in 2025.</li> </ul>	<ul style="list-style-type: none"> <li>Creates predictable seasonal demand for commercial vehicle tires, wheel balancing and related tire services.</li> <li>Supports replacement demand among fleets operating nationwide and in colder regions.</li> </ul>
<b>Periodic Vehicle Inspection</b>	<ul style="list-style-type: none"> <li>Annual inspection remains mandatory for trucks, buses and other heavy commercial vehicles.</li> <li>Vehicles must comply with roadworthiness, emissions and safety requirements to pass inspection.</li> </ul>	<ul style="list-style-type: none"> <li>Drives preventive maintenance activity prior to inspections.</li> <li>Supports recurring demand for brakes, lighting, steering, suspension, tires and emissions-related repairs.</li> </ul>
<b>Motor Vehicle Insurance</b>	<ul style="list-style-type: none"> <li>Mandatory traffic insurance remains required under Highway Traffic Law No. 2918.</li> <li>Commercial fleets frequently supplement compulsory insurance with comprehensive coverage and fleet insurance programs.</li> </ul>	<ul style="list-style-type: none"> <li>Sustains demand for collision repair, body parts, paint and insurer-approved repair services.</li> <li>Rising accident volumes continue to support collision-related aftermarket spending.</li> </ul>
<b>Tachograph &amp; Driver Monitoring Systems</b>	<ul style="list-style-type: none"> <li>Commercial vehicles engaged in passenger and freight transport are required to use approved tachograph systems and maintain operational records.</li> <li>Digital tachographs are increasingly prevalent across fleet operations.</li> </ul>	<ul style="list-style-type: none"> <li>Supports demand for electronic systems maintenance, calibration services and telematics-related aftermarket activities.</li> </ul>
<b>Speed Limitation &amp; Safety Equipment Regulations</b>	<ul style="list-style-type: none"> <li>Speed limiters remain mandatory for N2/N3 trucks and M2/M3 buses.</li> <li>Requirements also include rear underrun protection, ECE-compliant markings, fire extinguishers and other safety equipment.</li> </ul>	<ul style="list-style-type: none"> <li>Generates recurring replacement demand for safety-related components and inspection-related repairs.</li> <li>Increasing electronic safety content raises the value of replacement events.</li> </ul>
<b>Emissions &amp; Euro VI Compliance</b>	<ul style="list-style-type: none"> <li>Euro VI emissions standards continue to dominate new commercial vehicle registrations.</li> <li>Vehicles rely on SCR, DPF and AdBlue systems to meet emissions requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Creates a growing aftermarket for emissions-control components, sensors, DPF cleaning, SCR systems and AdBlue-related maintenance.</li> <li>Increases repair complexity and average repair value.</li> </ul>
<b>Digitalization &amp; Connected Vehicle Systems</b>	<ul style="list-style-type: none"> <li>Telematics, remote diagnostics and fleet management solutions are increasingly integrated into commercial vehicles and fleet operations.</li> </ul>	<ul style="list-style-type: none"> <li>Supports growth in diagnostic services, software-related maintenance and advanced electronic component replacement.</li> <li>Strengthens the role of technically capable service providers</li> </ul>

Source: Frost & Sullivan Analysis

# AUTOMOTIVE AFTERMARKET—KEY REGULATIONS, 2025 (2/2)

ENVIRONMENTAL REGULATION IS BECOMING A LARGER AFTERMARKET DRIVER THAN ELECTRIFICATION ITSELF. WHILE EV PENETRATION REMAINS NEGLIGIBLE IN TURKIYE'S MHCV PARC, EURO VI EMISSIONS SYSTEMS ARE ALREADY INCREASING REPAIR COMPLEXITY, DIAGNOSTIC REQUIREMENTS.

Legislative Topic	Overview	Impact on the Aftermarket
<b>Exhaust Emission Inspection</b>	<ul style="list-style-type: none"> <li>Trucks and buses are subject to periodic exhaust emission inspections, with the first inspection after the first year and annually thereafter.</li> <li>Vehicles must comply with applicable emissions limits to remain roadworthy.</li> </ul>	<ul style="list-style-type: none"> <li>Supports recurring demand for emissions-related maintenance and repairs.</li> <li>Drives replacement of sensors, injectors, EGR components, DPF systems and SCR/AdBlue-related parts.</li> <li>Increases workshop demand for diagnostic and emissions-testing capabilities.</li> </ul>
<b>Euro VI Compliance &amp; Transition Toward Euro VII</b>	<ul style="list-style-type: none"> <li>Euro VI remains the prevailing emissions standard in Turkiye.</li> <li>Turkiye is expected to gradually align with upcoming Euro VII regulations and evolving EU heavy-duty CO<sub>2</sub> reduction targets due to trade integration and vehicle import requirements.</li> <li>Future regulations are expected to include stricter pollutant limits and monitoring of brake and tire particle emissions.</li> </ul>	<ul style="list-style-type: none"> <li>Accelerates demand for advanced emissions-control technologies, including DPF, SCR, AdBlue systems and related sensors.</li> <li>Increases repair complexity and average repair values.</li> <li>Supports long-term growth in diagnostics, software updates and specialized emissions-system servicing.</li> </ul>
<b>Decarbonization &amp; Fleet Emissions Policies</b>	<ul style="list-style-type: none"> <li>Turkiye's 2053 net-zero target and the planned introduction of an Emissions Trading System (ETS) are expected to increase pressure on fleet operators to reduce emissions.</li> <li>Fleet operators serving EU customers are already facing growing sustainability and carbon-reporting requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Encourages adoption of fuel-efficiency technologies, alternative fuels and electrified commercial vehicles.</li> <li>Creates future opportunities for battery servicing, thermal management systems and remanufacturing activities.</li> <li>Increases demand for vehicle monitoring and fleet optimization solutions.</li> </ul>
<b>Maximum Load &amp; Weight Regulations</b>	<ul style="list-style-type: none"> <li>Commercial vehicles remain subject to maximum gross vehicle weight and axle-load restrictions.</li> <li>Compliance is enforced through weighbridges, roadside inspections and mobile controls.</li> </ul>	<ul style="list-style-type: none"> <li>Overloading accelerates wear of tires, brakes, suspension and driveline components.</li> <li>Weight enforcement encourages preventive maintenance and timely replacement of safety-critical parts.</li> <li>Supports recurring demand in high-wear categories, particularly among long-haul and construction fleets.</li> </ul>



# CONCLUSIONS

# KEY CONCLUSIONS

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### AGING FLEET OUTWEIGHS ELECTRIFICATION

- Turkiye's MHCV aftermarket remains fundamentally driven by fleet aging rather than electrification. Average vehicle age has increased to 18.1 years, while EV penetration remains below 0.02% of the parc, ensuring continued demand for traditional maintenance and repair categories through 2030.

### VALUE GROWTH IS OUTPACING PARC GROWTH

- Aftermarket revenue growth is increasingly driven by repair complexity rather than vehicle volume. While the MHCV parc is expected to grow at approximately 3.2% CAGR, aftermarket revenue is projected to expand at 5.8% CAGR, supported by Euro VI emissions systems, advanced electronics, automated transmissions and inflation-driven pricing.

### UPTIME IS THE NEW COMPETITIVE BATTLEGROUND

- Competition is shifting from product availability to uptime assurance. OEMs, distributors and service providers are expanding logistics networks, service coverage, mobile support and extended warranty programs as fleet operators prioritize vehicle availability and total cost of ownership over repair cost alone.

### CHANNELS ARE CONSOLIDATING AROUND SPECIALIZATION

- The market is becoming increasingly segmented between OES-led complex repairs and IAM-led post-warranty maintenance. Authorized networks are strengthening their position in diagnostics, software-enabled systems and emissions technologies, while independent workshops continue to dominate the aging vehicle parc and routine maintenance activities.

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