Infomerics Ratings

Infomerics Valuation And Rating Ltd.

SEBI REGISTERED/ RBI ACCREDITED/ NSIC EMPANELLED
CREDIT RATING AGENCY

Mr. Vipin Malik
(Chairman, Infomerics Ratings)

Dr. Manoranjan Sharma
(Chief Economist)

Mr. Athar Imam Raza
(Officer - Economic Analysis)

INDUSTRY OUTLOOK

AUTOMOBILE INDUSTRY OUTLOOK 2025: BUMPY RIDE AHEAD

15 April 2025

Introduction

India's automobile industry has grown significantly, reaching ₹22 lakh crore, and achieved a 9% sales growth in 2024, with 26.1 million units sold. At present, the US automobile industry is valued at ₹78 lakh crore, followed by China at ₹47 lakh crore. The electric vehicle market experienced a surge, with sales reaching 1.408 million units, driven by initiatives such as FAME I and II. India, now a global leader surpassing Japan, exports 50% of its two-wheelers and aims to generate 4 crore jobs.

With a focus on sustainability, the industry is advancing alternative fuels like ethanol, biodiesel, and electric energy, alongside innovative projects such as ropeway cable cars. Backed by research, innovation, and skill development programs, India is poised to become a global powerhouse in the automotive sector.[1]

Demand and Supply Status of Automobile Industry of India

The Indian automobile industry is experiencing robust growth across various vehicle categories, driven by strong demand from both rural and urban areas, as well as favourable economic conditions. In FY 25, total two-wheeler sales are projected to rise by 12.4% to 24.1 million units, nearing the all-time high of 24.5 million units recorded in FY 19. Domestic sales are expected to grow by 11.3% to 20 million units, supported by factors such as a normal monsoon, higher crop minimum support prices, and improved urban disposable incomes. Exports are also forecast to surge by 18.6%, reaching 4.1 million units.[2]

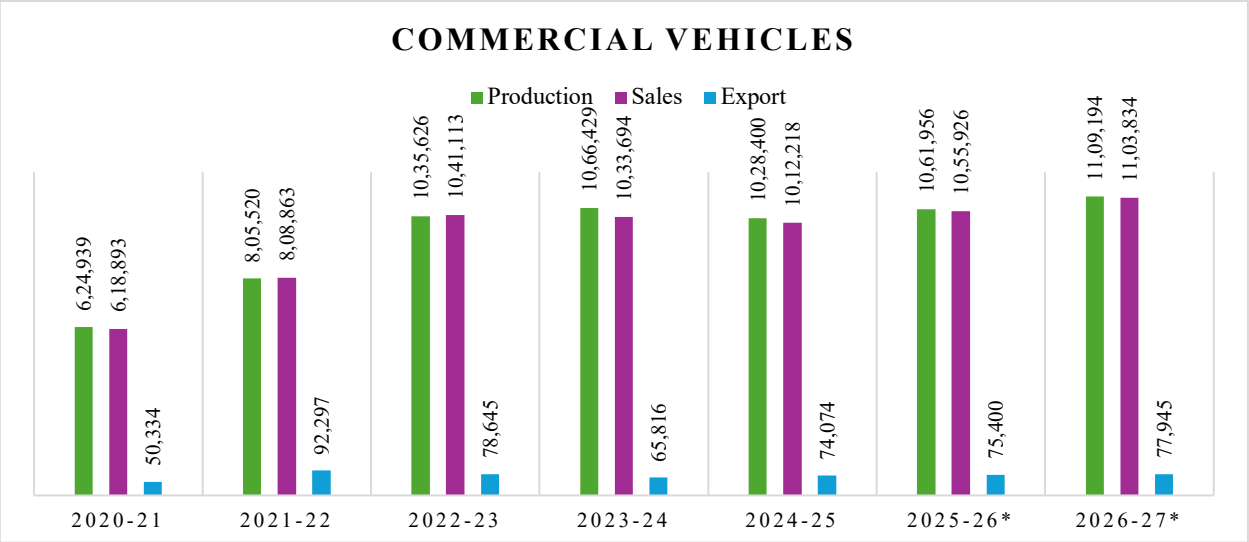
Segment-wise, motorcycle sales are anticipated to grow by 10.7% to 16.2 million units, while scooter sales are set to expand by 16.7% to 7.4 million units. This reflects a shift in consumer preferences, with scooters gaining traction among urban buyers and women. Scooters offer convenience with easy manoeuvrability in traffic, cater to diverse needs with ample storage and unisex design, and are increasingly affordable with competitive pricing and financing options, making them a practical choice for urban buyers and women in India. However, the entry-level motorcycle segment faces headwinds due to impending price increases triggered by stricter emission norms.[3]

Further growth is expected to moderate to 4.5% in FY 26, with total sales reaching 25.2 million units. A key challenge remains capacity utilization, which currently stands at 55-60%, well below the peak of 88% in FY19, despite significant capacity expansion in recent years. The electric two-wheeler segment, bolstered by government subsidies, has seen notable capacity additions, though its growth trajectory is stabilizing.

Commercial Vehicles

The commercial vehicles segment shows a steady recovery in production and sales from 2020-21 to 2022-23, reaching a peak of over 1 million units. The projections for 2026-27 indicate production at 1.1 million units and sales close to the same level. Exports peaked in 2021-22 but declined significantly afterward, showing a marginal recovery in later years (see Chart 1).

Chart 1: Demand and Supply Trend of Commercial Vehicles in India

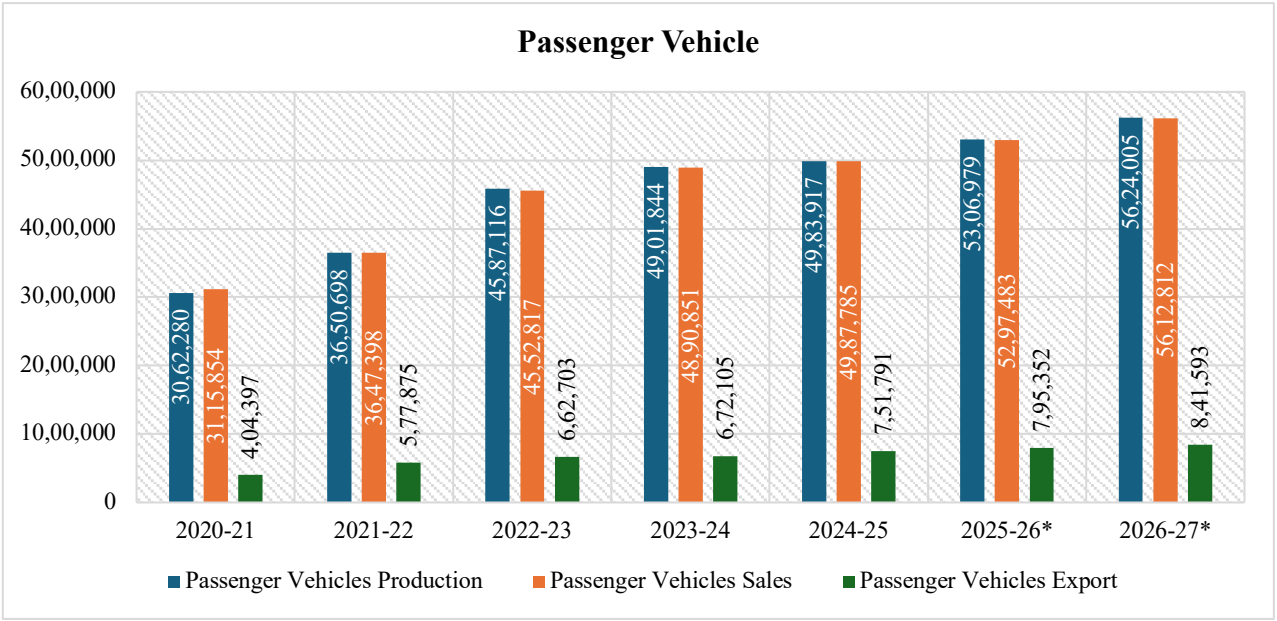


*Forecast. Sources: SIAM | CMIE Industry Outlook | Infomerics Economic Research

Passenger Vehicles

Passenger vehicles have experienced consistent growth in production, sales, and exports. Production and sales surpassed 4.5 million units by 2022-23 and are projected to reach over 5.6 million units by 2026-27. Export volumes have also shown significant growth, from 404,397 units in 2020-21 to an estimated 841,593 units in 2026-27, reflecting strong international demand and increasing domestic market penetration (see Chart 2).

Chart 2: Demand and Supply Trend of Passenger Vehicles in India

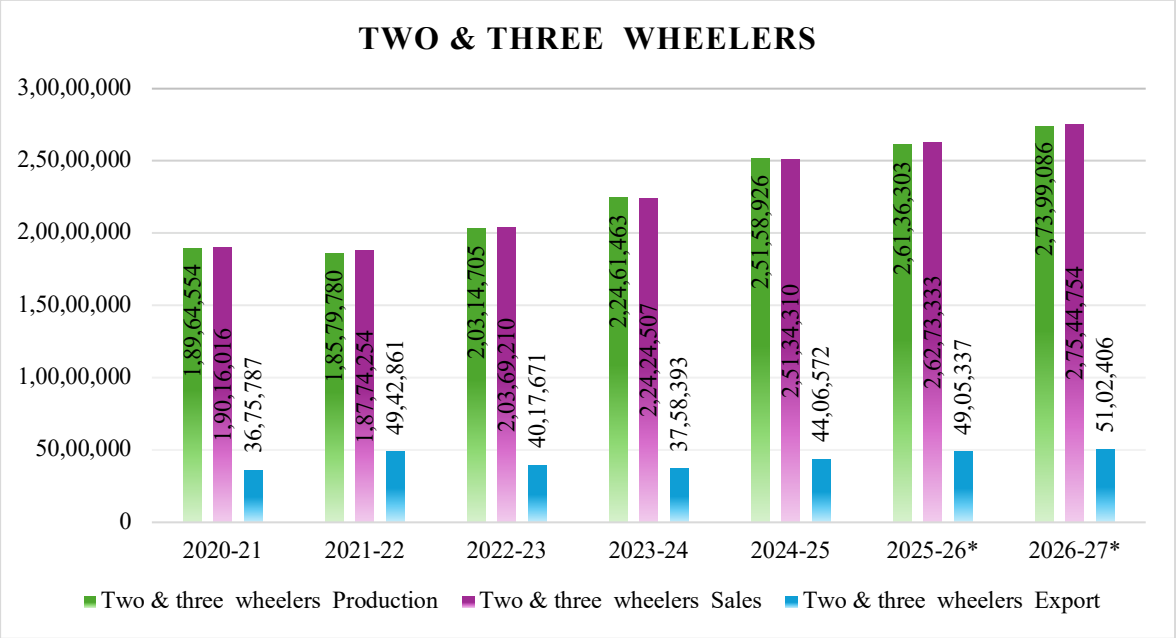


*Forecast. Sources: SIAM | CMIE Industry Outlook | Infomerics Economic Research

Two & Three Wheelers

Two-wheelers and three-wheelers are significant contributors to India's overall automobile industry growth, supported by strong domestic demand and improved market positioning. This segment dominates in terms of volume, with production and sales exceeding 20 million units by 2022-23 and projected to grow to over 27 million units by 2026-27. While exports fluctuated, there was a steady growth from 3.68 million units in 2020-21 to over 5.1 million units in 2026-27 (see Chart 3).

Chart 3: Demand and Supply Trend of Two & Three Wheelers in India



*Forecast. Sources: SIAM | CMIE Industry Outlook | Infomerics Economic Research

Automobile Industry's Retail Growth during the Calendar Year 2024

The year 2024 posed significant challenges for various industries in India, with intense heatwaves, multiple elections at both central and state levels, and uneven monsoons being the primary disruptors. Despite these adversities, the automobile industry demonstrated resilience, achieving notable growth and maintaining optimistic prospects amid the turbulence.

According to the Federation of Automobile Dealers Association (FADA), India's retail automobile industry registered a 9% year-on-year (YoY) growth during the calendar year 2024 (CY24). The two-wheeler (2W), three-wheeler (3W), passenger vehicle (PV), and tractor segments posted Y-o-Y growth of 10.78%, 10%, 5%, and 2.5%, respectively, while commercial vehicle (CV) retails remained nearly stagnant with a marginal growth of 0.07% (see Table 1).

Table 1: All India Vehicle Retail Data (From April 2024 to December 2024)

Category	FY'25*	FY'24*	Growth %
2W	14467968	13081797	10.60%
3W	920408	866441	6.23%
CV	730151	735545	-0.73%
PV	3002311	2888868	3.93%
TRAC	650136	648538	0.25%
Total	**19770974**	**18221189**	**8.51%**

* From April to December of the reporting year. Source: FADA Research

While the 2W segment narrowly fell short of surpassing its CY18 peak, the 3W, PV, and tractor segments achieved new all-time highs. However, the CV segment has yet to recover its CY18 peak - a year significantly influenced by the introduction of axle load norms.

Growth in the 2W segment was driven by improved supply chains, the launching of new models, and robust rural demand. But the segment faced challenges in the form of financing constraints and rising competition from electric vehicles (EVs). The CV segment experienced subdued growth due to uncertainties associated with elections, reduced infrastructure spending, and weaker-than-expected demand in the coal and cement industries. In contrast, the PV segment benefited from robust network expansion and a series of product launches. Margin pressures, however, emerged in the second half of the year due to higher inventory levels, prompting a discount war (see Table 2).

Table 2: All India Vehicle Retail Data for Calendar Year 2023 and 2024

Category	CY'24	CY'23	YoY %
2W	18912959	17072932	10.78%
3W	1221909	1105942	10.49%
E-Rickshaw (Passengers)	481786	474226	1.59%
E-rickshaw with cart (Goods)	58940	35149	67.69%
Three-wheeler (Goods)	124972	114732	8.93%
Three-wheeler (Passenger)	555236	480955	15.44%
Three-wheeler Personal)	975	880	10.80%
PV	4073843	3873381	5.18%
TRACTOR	894112	871918	2.55%
CV	1004856	1004120	0.07%
LCV	558207	562239	-0.72%
MCV	75560	70734	6.82%
HCV	317568	327202	-2.94%
Others	53521	43945	21.79%
Total	**26107679**	**23928293**	**9.11%**

* From April to December of the reporting year. Source: FADA Research

These trends highlight the evolving dynamics of the sector, marked by opportunities in demand recovery and innovation, alongside persistent challenges, such as regulatory pressures, pricing constraints, and the need for optimized production capacity. Balancing these factors will be critical for sustaining long-term growth in the industry.

Electric Vehicle Segment

Electric vehicle (EV) sales in India surged to 1.408 million units in 2024, achieving a 5.59% market penetration (up from 4.44% in 2023) because of a constellation of forces and factors. Such factors included technological advancements, heightening environmental consciousness, and enabling government policies. The share of electric car sales in total sales was about 2.5% in India in 2024.

The luxury electric vehicle (EV) market in India recorded modest growth of 6.7% in 2024, with most automakers witnessing declining sales. According to the Federation of Automobile Dealers Associations, overall electric passenger vehicle retail sales, however, surged (see Table 3).

Table 3: Mixed Bag for Luxury EV Sales

Luxury OEMs	2023	2024	% change YoY
BMW	1308	1211	-7.42
Mercedes-Benz	516	940	82.17
Volvo	570	442	-22.46
Audi	143	143	0
Porsche	96	73	-23.96
Total	**2633**	**2809**	**6.68**

Source: FADA Research

Tata Motors dominated the broader EV segment with 61,496 units sold, followed by JSW MG Motors at 21,484 units. Among luxury automakers, 2,809 EVs were sold collectively by BMW, Mercedes-Benz India, Volvo Cars India, Audi, and Porsche in 2024, up from 2,633 units in 2023. Notably, Mercedes-Benz India reported the highest growth in EV sales, with Fada data indicating an 82% rise driven by four new EV launches. However, the company later stated that its EV sales nearly doubled (94% growth), surpassing 6% of its total annual sales of 19,565 cars. Data for Tata Motors-owned Jaguar Land Rover's EV sales in India was not disclosed.

Luxury Segment Outlook for FY 2025-26

The luxury car segment in India witnessed improved supply chain stability and sustained demand for key models, resulting in satisfactory sales growth in FY25. Manufacturers in this segment anticipate that growth in FY26 may remain moderate, given the turbulence in financial markets and ongoing global geopolitical uncertainties.

In FY25, approximately 51,000 luxury cars were sold—a record for any single financial year. The segment recorded an overall growth of 3% during this period. Mercedes-Benz achieved its highest-ever sales in India, delivering 18,928 units in FY25, including 4,775 units sold between January and March 2025.

Jaguar Land Rover (JLR), a subsidiary of Tata Motors, outperformed the broader luxury segment, achieving its best-ever annual performance since entering the Indian market 17 years ago. JLR India sold 6,183 units in FY25, reflecting a 40% increase, while wholesale volumes reached 6,266 units, up 39%. In the January–March 2025 quarter alone, the company retailed 1,793 units, representing a remarkable 110% year-on-year growth. The JLR Defender model posted a 90% rise, while the domestically manufactured Range Rover and Range Rover Sport registered year-on-year growth rates of 72% and 42%, respectively.

Table 4: Luxury Car Sales in India (January – March 2025)

	Units	Y-o-Y % change
Mercedes-Benz	4,775	-11.80%
JLR India	1,793	110%
BMW India	3,914	7%
Audi India	1,223	17%
Lexus India	NA	17%

Sources: Business Standard, 11 April 2025 (Print)

BMW, the German luxury carmaker, recorded an 11% increase in sales during the January–December 2024 period, delivering 15,721 units. Between January and March 2025, it reported a 7% growth with 3,914 units sold. Audi India also demonstrated strong momentum with a 17% increase in sales during the January–March 2025 quarter, totaling 1,223 units, despite a 36% dip in the October–December 2024 period.

It is a moot point whether this growth momentum can be sustained because these are tumultuous times for India and the world due to the disruptive tariff whiplash of President Donald Trump. Things have now been put on hold for 90 days, and it remains to be seen how things unfold after this window in this world - a world of surging protectionism, rising geoeconomic fragmentation, and heightening global tensions threatening the collapse of the Bretton Woods world economic order built assiduously over the decades. The Bretton Woods world financial architecture attempted to foster collaboration and growth among the participating countries in a world devastated by the ravages of the two World Wars.

Market share of Original Equipment Manufacturers (OEMs)

Two-Wheeler OEM

Hero Motocorp retained its leadership in Two-wheeler with 29.02% market share (54.9 lakh units), but its dominance eroded (down from 31.33% in CY'23) as Honda Motorcycle and Scooter India surged to 25.37% share (47.98 lakh units), registering a 21% YoY volume growth. Honda has a stronghold in the scooters and entry-level bikes segment. TVS Motor grew marginally to 17.13% share, likely aided by premium models like Apache and its EV portfolio. It is noteworthy to mention here that the EV segment is capturing the market with better OEMs - Ola Electric doubled its share to 2.15% (4.08 lakh units, +52% YoY), while Ather Energy rose to 0.67% share (+20% YoY). Legacy players like Bajaj Auto Group faced slight declines (11.84% to 11.55%), with its EV subsidiary Chetak Technology contributing negligible volumes (see Table 5).

Table 5: Two-wheeler OEM Market Share Comparison

Segment	CY'24	Market Share (%) CY'24	CY'23	Market Share (%) CY'23
Two-Wheeler OEM				
HERO MOTOCORP LTD	5,487,778	29.02%	5,349,423	31.33%
HONDA MOTORCYCLE AND SCOOTER INDIA (P) LTD	4,797,974	25.37%	3,969,410	23.25%
TVS MOTOR COMPANY LTD	3,238,852	17.13%	2,869,768	16.81%
BAJAJ AUTO GROUP	2,184,506	11.55%	2,021,618	11.84%
BAJAJ AUTO LTD	*2,184,502*	*11.55%*	*2,016,767*	*11.81%*
CHETAK TECHNOLOGY LIMITED	*4*	*0.00%*	*4,851*	*0.03%*
SUZUKI MOTORCYCLE INDIA PVT LTD	956,403	5.06%	806,022	4.72%
ROYAL-ENFIELD (UNIT OF EICHER LTD)	814,004	4.30%	785,298	4.60%
INDIA YAMAHA MOTOR PVT LTD	660,684	3.49%	580,459	3.40%
OLA ELECTRIC TECHNOLOGIES PVT LTD	407,559	2.15%	267,378	1.57%
ATHER ENERGY PVT LTD	126,174	0.67%	104,735	0.61%
GREAVES ELECTRIC MOBILITY PVT LTD	35,057	0.19%	24,042	0.14%
PIAGGIO VEHICLES PVT LTD	34,762	0.18%	36,059	0.21%
CLASSIC LEGENDS PVT LTD	32,852	0.17%	33,141	0.19%
BGAUSS AUTO PRIVATE LIMITED	18,032	0.10%	11,454	0.07%
Others Including EV	118,322	0.63%	214,125	1.25%
Total	**18,912,959**	**100%**	**17,072,932**	**100%**

Note: The OEM numbers do not have figures from Telangana State. Vehicle Retail Data has been collated as on 04.01.25 in collaboration with Ministry of Road Transport & Highways, Government of India and has been gathered from 1,373 out of 1,434 RTOs. Others include OEMs accounting for less than 1% Market Share
Source: FADA Research | Infomerics Economic Research

Three-Wheeler OEM

Bajaj Auto maintained leadership (35.92% share) in the Three-wheeler segment but faced marginal erosion, while Mahindra & Mahindra capitalized on electrification. Mahindra Last Mile Mobility, its EV-focused arm, skyrocketed to 6.1% share (74,480 units, +461% YoY), propelling Mahindra's combined share to 12.3% (up from 6.6% in CY'23). Smaller EV players like YC Electric (+8% YoY) and Saera Electric (+15% YoY) also expanded, though Bajaj and Piaggio still dominate the ICE segment (see Table 6).

Table 6: Three-Wheeler OEM Market Share Comparison

Segment	CY'24	Market Share (%) CY'24	CY'23	Market Share (%) CY'23
Three-Wheeler OEM				
BAJAJ AUTO LTD	438,941	35.92%	401,423	36.30%
PIAGGIO VEHICLES PVT LTD	93,731	7.67%	90,602	8.19%
MAHINDRA & MAHINDRA LIMITED	76,450	6.26%	60,076	5.43%
MAHINDRA LAST MILE MOBILITY LTD	*74,480*	*6.10%*	*13,278*	*1.20%*
MAHINDRA & MAHINDRA LIMITED	*1,970*	*0.16%*	*46,798*	*4.23%*
YC ELECTRIC VEHICLE	43,979	3.60%	40,812	3.69%
SAERA ELECTRIC AUTO PVT LTD	28,293	2.32%	29,329	2.65%
ATUL AUTO LTD	27,083	2.22%	22,580	2.04%
DILLI ELECTRIC AUTO PVT LTD	25,043	2.05%	25,100	2.27%
TVS MOTOR COMPANY LTD	23,376	1.91%	17,171	1.55%
MINI METRO EV L. L. P	14,764	1.21%	15,961	1.44%
UNIQUE INTERNATIONAL	13,706	1.12%	13,570	1.23%
ENERGY ELECTRIC VEHICLES	13,389	1.10%	11,084	1.00%
HOTAGE INDIA	12,489	1.02%	12,839	1.16%
Others including EV	410,665	0.3361	365,395	33.04%
Total	**1,221,909**	**100%**	**1,105,942**	**100%**

Source: FADA Research | Infomerics Economic Research

Commercial Vehicle OEM

Tata Motors remained the leader in the CV segment but lost significant share (36.4% to 34.4%), despite selling 3.46 lakh units. Mahindra & Mahindra closed the gap, growing to 24.98% share (2.51 lakh units, +6% YoY), driven by demand for small CVs and last-mile logistics vehicles. Ashok Leyland held steady at approximately 16.5% share, while VE Commercial Vehicles and Force Motors posted modest gains.

The segment reflects rising competition, with Tata facing pressure to innovate in a market increasingly prioritizing cost-efficiency and versatility (see Table 7).

Table 7: Commercial Vehicles OEM Market Share Comparison

Segment	CY'24	Market Share (%) CY'24	CY'23	Market Share (%) CY'23
Commercial Vehicle OEM				
TATA MOTORS LTD	345,928	34.43%	365,749	36.42%
MAHINDRA & MAHINDRA LIMITED	251,058	24.98%	236,836	23.59%
ASHOK LEYLAND LTD	166,390	16.56%	169,075	16.84%
VE COMMERCIAL VEHICLES LTD	74,542	7.42%	74,082	7.38%
MARUTI SUZUKI INDIA LTD	43,582	4.34%	42,854	4.27%
DAIMLER INDIA COMMERCIAL VEHICLES PVT. LTD	20,985	2.09%	21,099	2.10%
FORCE MOTORS LIMITED	18,452	1.84%	15,175	1.51%
SML ISUZU LTD	11,617	1.16%	10,442	1.04%
Others	72,302	7.20%	68,808	6.85%
Total	**1,004,856**	**100%**	**1,004,120**	**100%**

Source: FADA Research | Infomerics Economic Research

Passenger Vehicle OEM

Maruti Suzuki retained its dominance (40.26% share) in the PV segment but lost marginal ground due to slower SUV portfolio expansion. Mahindra & Mahindra emerged as the biggest gainer, jumping to 12.03% share (4.9 lakh units, +21% YoY), fuelled by robust demand for its Thar, XUV700, and Scorpio-N SUVs. Toyota Kirloskar grew 34% YoY (2.59 lakh units), leveraging the Hyryder SUV, while Kia India held steady with 58,300 units. Luxury brands like Mercedes-Benz (+11.5% YoY) and BMW (+14% YoY) capitalized on premiumization trends. EV players MG Motor (+5.4% YoY) and BYD (+40% YoY) grew, though volumes remain niche (see Table 8).

Table 8: Passenger Vehicle OEM Market Share Comparison

Segment	CY'24	Market Share (%) CY'24	CY'23	Market Share (%) CY'23
PV OEM				
MARUTI SUZUKI INDIA LTD	1,639,978	40.26%	1,582,119	40.85%
HYUNDAI MOTOR INDIA LTD	559,984	13.75%	551,369	14.23%
TATA MOTORS LTD	538,221	13.21%	526,010	13.58%
MAHINDRA & MAHINDRA LIMITED	490,169	12.03%	404,292	10.44%
TOYOTA KIRLOSKAR MOTOR PVT LTD	258,684	6.35%	193,285	4.99%
KIA INDIA PRIVATE LIMITED	237,479	5.83%	227,221	5.87%
SKODA AUTO VOLKSWAGEN GROUP	79,427	1.95%	92,228	2.38%
SKODA AUTO VOLKSWAGEN INDIA PVT LTD	*78,813*	*1.93%*	*90,773*	*2.34%*
VOLKSWAGEN AG/INDIA PVT. LTD.	*12*	*0.00%*	*33*	*0.00%*
AUDI AG	*501*	*0.01%*	*1,397*	*0.04%*
SKODA AUTO INDIA/AS PVT LTD	*101*	*0.00%*	*25*	*0.00%*
HONDA CARS INDIA LTD	68,923	1.69%	77,032	1.99%
MG MOTOR INDIA PVT LTD	52,532	1.29%	49,845	1.29%
RENAULT INDIA PVT LTD	40,637	1.00%	52,956	1.37%
NISSAN MOTOR INDIA PVT LTD	26,169	0.64%	27,836	0.72%
MERCEDES -BENZ GROUP	17,334	0.43%	15,550	0.40%
MERCEDES-BENZ INDIA PVT LTD	*15,797*	*0.39%*	*14,305*	*0.37%*
MERCEDES -BENZ AG	*1,422*	*0.03%*	*1,196*	*0.03%*
DAIMLER AG	*115*	*0.00%*	*49*	*0.00%*
BMW INDIA PVT LTD	14,278	0.35%	12,499	0.32%
FORCE MOTORS LIMITED	8,612	0.21%	7,181	0.19%
PCA AUTOMOBILES INDIA PVT LTD	6,643	0.16%	8,968	0.23%
JAGUAR LAND ROVER INDIA LIMITED	4,636	0.11%	3,471	0.09%
FCA INDIA AUTOMOBILES PRIVATE LIMITED	4,580	0.11%	7,333	0.19%
BYD INDIA PRIVATE LIMITED	2,818	0.07%	2,012	0.05%
VOLVO AUTO INDIA PVT LTD	1,824	0.04%	2,110	0.05%
Others	20,915	0.51%	30,064	0.78%
Total	**4,073,843**	**100%**	**3,873,381**	**100%**

Source: FADA Research | Infomerics Economic Research

Tractor OEM

Mahindra & Mahindra consolidated its leadership, with its tractor and Swaraj divisions jointly capturing 41.95% share (up from 40.54%). Escorts Kubota (9.78% down from 10.4%) and TAFE (11.54% down from 11.84%) lost ground, while John Deere (+3.5% YoY) and Eicher Tractors (+5% YoY) gained, reflecting demand for high-horsepower machinery. The segment highlights rural resilience, with total tractor sales growing 2.5% YoY (see Table 9).

Table 9: Tractor OEM Market Share Comparison

Segment	CY'24	Market Share (%) CY'24	CY'23	Market Share (%) CY'23
Tractor OEM				
MAHINDRA & MAHINDRA LIMITED (TRACTOR)	208,878	23.36%	199,453	22.88%
MAHINDRA & MAHINDRA LIMITED (SWARAJ DIVISION)	166,200	18.59%	153,992	17.66%
INTERNATIONAL TRACTORS LIMITED	117,013	13.09%	109,954	12.61%
TAFE LIMITED	103,182	11.54%	103,244	11.84%
ESCORTS KUBOTA LIMITED (AGRI MACHINERY GROUP)	87,444	9.78%	90,660	10.40%
JOHN DEERE INDIA PVT LTD (TRACTOR DIVISION)	67,219	7.52%	64,917	7.45%
EICHER TRACTORS	59,495	6.65%	56,621	6.49%
CNH INDUSTRIAL (INDIA) PVT LTD	35,925	4.02%	35,214	4.04%
KUBOTA AGRICULTURAL MACHINERY INDIA PVT.LTD.	16,343	1.83%	18,864	2.16%
Others	32,413	3.63%	38,999	4.47%
Total	**894,112**	**100%**	**871,918**	**100%**

Source: FADA Research | Infomerics Economic Research

EV Charging Station Infrastructure

India's EV market is growing rapidly, but the charging infrastructure remains a critical bottleneck. According to recent parliamentary data, 25,202 public EV charging stations (EVPCS) have been installed nationwide as of now (until November 2024), marking significant progress from the 16,347 stations reported by March 2024 (see Table 10).[4]

Table 10: State / UT wise installed EV Public Charging Stations (EVPCS)

S. No.	State/UT Name	No. of EVPCS	S. No.	State/UT Name	No. of EVPCS
1	Karnataka	5765	19	Jharkhand	256
2	Maharashtra	3728	20	Uttarakhand	177
3	Uttar Pradesh	1989	21	Jammu & Kashmir	159
4	Delhi	1941	22	Goa	137
5	Tamil Nadu	1413	23	Himachal Pradesh	106
6	Kerala	1212	24	Tripura	50
7	Rajasthan	1129	25	Manipur	46
8	Gujarat	992	26	Meghalaya	43
9	Telangana	956	27	Puducherry	41
10	Madhya Pradesh	903	28	Arunachal Pradesh	41
11	West Bengal	763	29	Nagaland	28
12	Haryana	709	30	Chandigarh	13
13	Andhra Pradesh	601	31	Mizoram	12
14	Punjab	593	32	UT of D&NH and D&D	6
15	Odisha	488	33	Sikkim	5
16	Bihar	347	34	Andaman & Nicobar	4
17	Assam	276	35	Lakshadweep	1
18	Chhattisgarh	271	36	Ladakh	1
Total EVPCS (nos.) = 25202					

Source: Charging Stations for Electric Vehicles, Rajya Sabha Unstarred Question No. 2960. Answered on 20.12.2024, Ministry of Heavy Industries, GoI.

India has a poor EV-to-charger ratio of 1:400, lagging behind global benchmarks. Challenges include slow charging speeds (2-3 hours), fragmented regulations, grid instability, and resistance from residential societies. Despite progress, projections suggest India needs 1.32 million charging stations by 2030 to support 50 million EVs, requiring massive annual installations of 400,000 chargers.

To address these gaps, the government has approved 2,877 charging stations across states and 1,576 on highways. Automakers like Kia and Maruti are rolling out faster charging solutions (e.g., 18-minute charges) and expanding networks, while Mahindra offers lifetime battery warranties. Policy recommendations emphasize R&D in super-fast charging, standardized norms, and single-window clearances for installations.

Collaborative efforts with policymakers, industry players, and innovators aim to scale infrastructure, improve grid management, and achieve India's 2030 target of 30% EV sales, ensuring sustainable mobility growth. Towards this end, the government is facilitating a slew of initiatives for manufacturing and infrastructure, with a renewed thrust on localizing supply chains and enhancing battery technologies.

The Government of India's US$500-million incentive policy aimed at attracting investments from global EV companies by offering multiple incentives, positioning India as a leading hub for advanced EV manufacturing. Key objectives include providing Indian consumers innovative EV models, strengthening the Make in India initiative, lowering production costs, reducing oil imports, slashing urban air pollution, and boosting competitiveness in the domestic auto manufacturing sector.

Institutional Initiatives

India has taken several institutional initiatives to promote the growth and adoption of electric vehicles (EVs) within the automobile industry. The Government policies are targeting a 30 per cent EV adoption for private cars and up to 80 per cent for two- and three-wheelers by 2030, accelerating domestic EV manufacturing. The Ministry of Heavy Industries is actively implementing several schemes, including the Electric Mobility Promotion Scheme (EMPS)-2024, which allocated ₹500 crore over four months (April–July 2024). This scheme incentivized buyers of electric two-wheelers (e-2Ws) and three-wheelers (e-3Ws), focusing on reducing their upfront costs.

As brought out by the Union Minister for Heavy Industries and Steel, the growth is attributable to rising consumer trust, government incentives like the Production-Linked Incentive (PLI) scheme, and industry innovation. The PLI scheme for the auto sector, with a ₹25,938 crore budget, has approved 82 of 115 applications, projected to attract ₹42,500 crore in investments, generate ₹2.31 lakh crore in incremental sales, and create 140,000 jobs over five years, with ₹20,715 crore invested and ₹10,472 crore in incremental sales already recorded by September 2024. Despite global challenges, India's automotive sector grew 9% year-on-year, retailing 26.1 million vehicles in 2024, reflecting robust domestic demand and resilience.

The Production Linked Incentive (PLI) Scheme for the Automobile and Auto Component Industry (PLI-AAT), with a budgetary outlay of ₹25,938 crore, supports the manufacturing of various EV categories, including e-2Ws, e-3Ws, e-4Ws, e-buses, and e-trucks. Complementing this, the PLI-ACC Battery Storage Scheme, with an allocation of ₹18,100 crore, aims to enhance domestic production of advanced chemistry cell batteries.

The government has also launched a Scheme to promote the manufacturing of Electric Passenger Cars, attracting global EV manufacturers and positioning India as a leading hub for EV production. To make EVs more affordable, the GST on EVs and chargers has been reduced to 5%, and battery-operated vehicles now receive green license plates and exemptions from permit requirements. Moreover, states have been advised to waive road tax on EVs, further reducing their initial costs.

Since 2015, subsidies have been provided under the Faster Adoption and Manufacturing of Electric and Hybrid Vehicles in India (FAME) scheme, with Phase I and Phase II laying the groundwork for EV adoption. These efforts, reinforced by the newly introduced PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) scheme, aim to strengthen the EV ecosystem, including incentives for buses, e-2Ws, and e-3Ws by financial incentives to manufacturers and consumers. Such welcome incentives reduce the upfront cost of EVs and make them more affordable. Similarly, schemes, such as the Advanced Chemistry Cell Production Linked Incentive (ACC PLI), are aimed at enhancing domestic manufacturing of advanced battery technologies, which is a basic requirement for the EV sector. Capital Manufacturing for Mobility (CMM) refers to the broader set of incentives and policies aimed at encouraging investment in the manufacturing of EV components and vehicles.

Industry Risks and Challenges

India's automobile industry faces intensifying global competition, driven by multifaceted challenges that threaten its growth and export ambitions. A primary concern is China's dominance in the electric vehicle (EV) sector, where manufacturers like BYD and SAIC leverage state subsidies, economies of scale, and control over critical battery supply chains to produce EVs at 20–30% lower costs than Indian counterparts.[5] This cost advantage allowed Chinese firms to undercut Indian exports in key markets such as Africa and Latin America, where Chinese EVs accounted for 70% of imports in 2024. Compounding this issue, China's strategic acquisition of lithium and cobalt mining rights in resource-rich regions further marginalizes India, which remains heavily reliant on imported raw materials.

Meanwhile, stringent regulatory pressures from the European Union, including Euro 7 emission norms and carbon border taxes, raise compliance costs for Indian exporters by 15–20%, eroding price competitiveness.[6] European automakers like Volkswagen are also shifting to "local-for-local" manufacturing to bypass tariffs, reducing demand for Indian exports.

Adding to these challenges, Japan and South Korea continue to lead in hybrid and hydrogen technologies, sectors where India lags due to limited R&D investment. Toyota's hybrid sales, for instance, grew by 40% year-on-year in 2024, while Indian hybrids remain niche. Japanese brands dominate India's domestic market, controlling 65% of passenger vehicle sales through established players like Maruti Suzuki, stifling opportunities for homegrown innovation.

In emerging markets, Southeast Asian nations like Thailand and Indonesia are emerging as formidable rivals, leveraging tax breaks and infrastructure investments to attract EV manufacturing FDI. Thailand's EV production reached 500,000 units in 2024, rivalling India's output, while African nations like Nigeria imposed 30–50% tariffs on imported vehicles to promote local assembly, directly impacting India's CKD exports.[7]

Supply chain vulnerabilities further exacerbate these challenges. India's dependence on China, Taiwan, and South Korea for 90% of its semiconductors has led to production delays, as seen in Mahindra's EV rollout setbacks in 2023–24.[8] Similarly, China's control over 75% of global battery production (Lithium-ion batteries) leaves Indian manufacturers scrambling to secure affordable cells, with domestic capacity meeting 5% of demand.[9]

Currency volatility adds another layer of complexity: the rupee's 12% depreciation against the dollar (2021–24) raised costs for imported components like EV motors, while non-tariff barriers such as the EU's proposed carbon tax and the U.S. Inflation Reduction Act's local-content rules disadvantage Indian exports.

The hybrid vehicles are taxed at the highest GST rate of 28%, making them less attractive compared to EVs or conventional petrol/diesel vehicles.[10] The industry stakeholders are advocating a reduction in GST from 28% to 18% on two-wheelers up to 125 cc, as these serve as a mobility option for the masses rather than being categorized as sin goods.

India's automobile industry also faces a significant challenge with unsold inventory of nearly 8 lakh cars (worth ₹79,000 crore) due to rising vehicle prices from higher input costs, taxes, and regulatory compliance (e.g., BSVI norms), coupled with reduced buyer affordability stemming from increased interest rates and stricter lending. Aggressive OEM production strategies have oversupplied some models, while shifting consumer preferences toward EVs, compact SUVs, and shared mobility have left traditional sedans and hatchbacks unsold.

Regional economic disparities, poor demand forecasting, inadequate digital infrastructure, and delayed EV policy adoption further exacerbate inventory mismanagement, demanding urgent solutions to stabilize the sector's sustainability and profitability.

Emerging Contours-Squeeze on Autos, Constricted Margins, Reduced Growth Prospects

In an intensification aimed at boosting US manufacturing but disrupting global supply chains, President Donald Trump announced that he was placing 25% tariffs on auto imports, citing national security concerns. While the auto industry was bracing for an impact from President Trump's trade war, the move was not expected this hard, this soon. This is why it roiled global markets and risks rising from a trade war and accelerating inflation.

A number crunching reveals that half of the roughly 16 million cars, SUVs, and light trucks Americans bought in 2024 were imports. The USA imported $474 billion of automotive products in 2024. Mexico, Japan, South Korea, Canada, and Germany were the largest suppliers. While President Trump claimed the move would bring more auto and manufacturing jobs to America, it has been estimated that if this steep tariff remains in force, it could add $75 billion a year to automaker costs. Even cars assembled in the US would be hit by higher tariffs because many companies rely on imported parts, and prices may rise by $6,000 a piece.

The USA is not a large market for Indian Passenger vehicles and trucks, which account for less than 1 % of total exports. The export sales of automobile manufacturers with direct exposure to the US market, like Tata's Jaguar and Land Rover, would be dented. This tariff would markedly dampen India's $6.79 billion auto part exports to the US and tyre exports to the US. Tyre exports to the US were worth $ 500 million and constituted 17 % of India's global exports.

President Trump has always made a strong case for "*the America First foreign policy*". But he would have done well to realize **"***the best laid plans of mice and men often go astray***".**

Robert Burns wrote in his poem *To a Mouse* (1785),

"*The best laid schemes o' Mice an' Men*

Gang aft agley,

An' lea'e us nought but grief an' pain,

For promis'd joy!"

Is this a case of the "*theatre of the absurd*?"

Higher costs in the US will lead to increased vehicle prices and slower sales. Accordingly, in this world of shifting trade dynamics, President Trump ought not to have resorted to such myopic, short-sighted policies, and instead focused on advanced manufacturing, research and development (R&D), and workforce upskilling. Over the long haul, growth is a function not of narrow, parochial protectionist pursuits but of cooperation, innovation, and open markets.

Broader Macroeconomic Risks- Sobering Report of London's Imperial College Business School

It is not always realized, much less felt, that the rising adoption of EVs is not all hunky-dory and, therefore, the entire issue of EVs needs to be examined in a broader and comprehensive perspective. This thesis can be substantiated by the findings of a recent report entitled *Driving Decarbonisation: Cross-Sectoral Second Order Impacts of High EV Penetration in India* (March 2025) from London's Imperial College Business School. This report demonstrated how India's automotive and industrial sectors needed to prepare for the impact of EVs (battery electric vehicles), also referred to as the second-order effects of the transition.[11]

Let us highlight some contextually significant real and worrisome concerns. Should the sales of EVs zoom to 25% of all vehicles sold in India (up from around 8 per cent currently) in this scramble for EVs, this could pose a financial risk to automotive companies dependent on traditional car manufacturing. Furthermore, if electric vehicles account for 25% of all vehicles in India, electricity usage in the country could rise by almost 60%, necessitating consequential upgrades to the electricity grid. This is a tall order and requires synchronized measures to develop decarbonisation investment plans and a renewed thrust on renewable sources of energy with a sense of urgency. The cross-sector impact also includes soaring energy demand, causing electricity demand in the transportation sector to rise by 59% in 2030 from the current level.

What is prognostically concerning is that 6.7 million new charging points may be needed by 2030 to meet the surging demand for electric cars- a task, which is difficult but not undoable. This paradigm shift requires focused attention on multiple areas. Such areas include significant government and private sector investment, the right infrastructure, policy changes, such as time-of-use tariffs to incentivise charging at low-demand times, and installed renewable energy capacity.

It needs no clairvoyance to perceive that while such tectonic changes will impact both the automobile industry and the individual companies, there will be a differential impact on India's three largest car manufacturers, viz., Maruti-Suzuki India, Mahindra and Mahindra (M&M), and Tata Motors. Tata Motors has 70% of the electric vehicle market while M&M has a 10% share. Maruti Suzuki, which is a late entrant to the BEV (battery electric vehicles) segment, attempts to position itself as the biggest producer, exporter, and seller of EVs in India. While there is no clarity yet on the way forward, one way could be to offer sustainability-linked bonds – financial instruments linked to specific ESG goals in conformity with the avowed pursuit of harmonizing the seemingly disparate objectives of financial incentives and sustainable development goals (SDGs).

With over 90% of the global Li production concentrated in Chile, Argentina, Bolivia, Australia and China, there is a concentration risk because of the heavy reliance on Li-ion batteries in the EV mix. While the need to broaden and diversify the EV mix is clear and unmistakable, the viability issue remains at the core of the decision-making calculus.

The Way Ahead

India's automotive industry is poised for significant growth. The industry is, however, facing persisting bottlenecks. It thus stands at a critical juncture, particularly because of Trump's recent 25% tariffs on auto exports to the US, along with additional duties. While domestic demand remains robust, the industry must strategically navigate global competition, particularly from China, and accelerate its transition to electric mobility.

This requires a multi-pronged approach encompassing substantial investments in R&D, domestic manufacturing of key components, such as batteries and semiconductors, and the development of a comprehensive EV ecosystem. Addressing infrastructure bottlenecks, including charging stations and road quality, and streamlining regulatory processes, are also crucial for sustained growth and export competitiveness. Furthermore, targeted policies must support MSMEs in the auto component sector and manage the current issue of high inventory levels.

The transition to electric vehicles presents both an opportunity and a challenge. While government incentives spurred initial adoption, a holistic approach is needed for a sustainable EV market. This includes focusing on accessible and reliable charging infrastructure, addressing range anxiety and affordability concerns, and developing a skilled workforce to support the EV sector. Simultaneously, the industry must proactively address competition from established global players by investing in indigenous technologies, particularly in hybrid and hydrogen fuel cell vehicles, and developing effective export strategies to penetrate new markets.

Rationalizing the GST structure for hybrid vehicles and smaller two-wheelers can further support market growth and accessibility.

Ultimately, the success of India's automotive industry rests on a collaborative and synergistic effort with the government, industry, and research institutions. A long-term vision marked by stable and supportive policies is a prerequisite to investment and fosters innovation. By proactively addressing the challenges of competition, supply chain vulnerabilities, and infrastructure development, India can strengthen its position as a global automotive powerhouse and a leader in sustainable mobility solutions.

References

[1] FADA Research, https://fada.in/images/press-release/1678ba180647edFADA%20Commences%20the%2013th%20Auto%20Summit%202025.pdf

[2] FADA Research, https://fada.in/images/press-release/16613636250c94FADA%20releases%20March%202024%20and%20FY%202024%20Vehicle%20Retail%20Data.pdf

[3] Assessment of electric two-wheeler, and three-wheeler industry in India, Greaves Electric Mobility (December 2024), https://greaveselectricmobility.com/pdf/Assessment%20of%20electric%20two-wheeler,%20and%20three-wheeler%20industry%20in%20India.pdf

[4] Charging Stations for Electric Vehicles, Rajya Sabha Unstarred Question No. 2960. Answered on 20.12.2024, Ministry of Heavy Industries, GoI. https://sansad.in/getFile/annex/266/AU2960_3Yg47Z.pdf?source=pqars

[5] TRADE POLICY REVIEW, China, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/TPR/S458R1.pdf&Open=True

[6] The Economic Times, https://economictimes.indiatimes.com/news/economy/foreign-trade/carbon-tax-proposed-by-eu-unilateral-arbitrary-to-hurt-indias-export-fm-sitharaman/articleshow/114085692.cms?from=mdr (Accessed on January 28, 2025)

[7] International Trade Administration, https://www.trade.gov/country-commercial-guides/nigeria-import-tariffs

[8] International Trade Administration, U.S. Department of Commerce. https://www.trade.gov/market-intelligence/india-semiconductor-and-electronics-industry

[9] How Innovative Is China in the Electric Vehicle and Battery Industries? Information Technology & Innovation Foundation, https://itif.org/publications/2024/07/29/how-innovative-is-china-in-the-electric-vehicle-and-battery-industries/

[10] SIAM, https://www.siam.in/cpage.aspx?mpgid=16&pgid1=18&pgidtrail=85

[11] Centre for Climate Finance & Investment (March 2024), *Driving Decarbonisation: Cross-Sectoral Second Order Impacts of High EV Penetration in India*, Imperial College of Business