PRIMUS PARTNERS

PRIMUS RESEARCH

# Automobile Industry

SECTOR IN FOCUS

May 2024

## Primus Partners Analysis

India's Automobile Industry grew **19% in value** in FY 24

## IN THIS NEWSLETTER

# 01 India Automobile Value Report - II

## Global Automobile Scenario

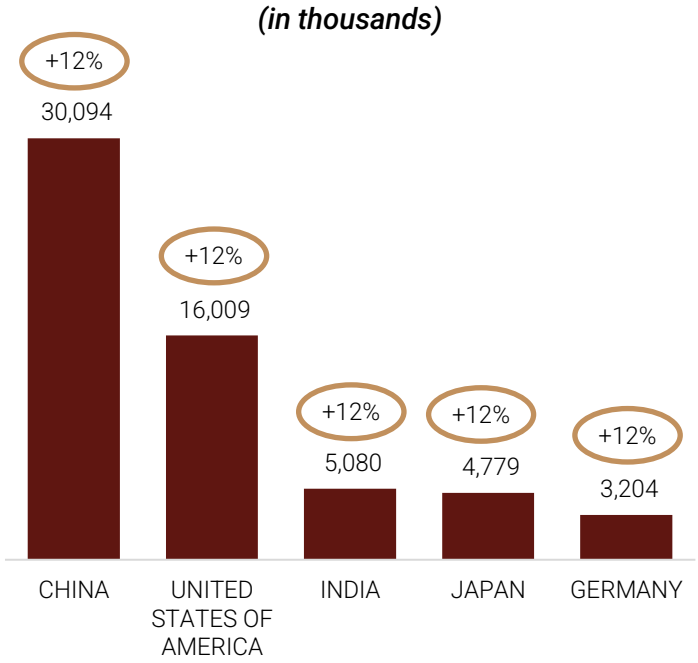
2023-24 proved to be a strong year for the global automobile industry. The lingering pent-up demand from the COVID-19 pandemic remained active, and many of the supply chain constraints eased up. According to Organisation Internationale des Constructeurs d'Automobiles(OICA), the Global Auto Industry grew by ~12% in terms of vehicles sold in 2023.

**Global Pecking Order :** The OICA also reported that India ranked as the world's third-largest market for vehicle registrations, including passenger cars, LCVs, HCVs, and buses for the calendar year 2023:

1. China
2. USA
3. India
4. Japan
5. Germany

However, the average price of a vehicle sold in India is significantly lower compared to advanced countries. According to JATO Dynamics, India would rank in the mid-teens in terms of value.

**Number of Vehicles Registered in 2023**
***(in thousands)***



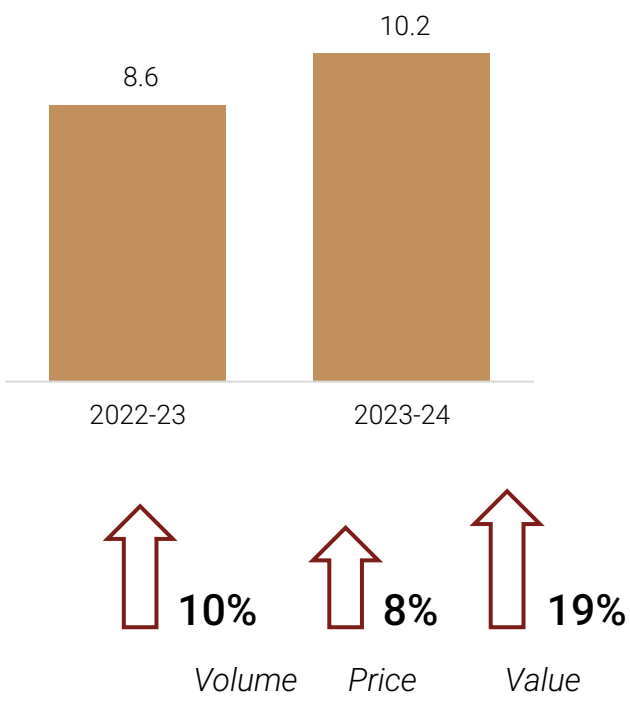

*Source: OICA*

*While India is #3 in terms of vehicles registered, in terms of value, it is behind Japan and Germany*

## India Automobile Industry grew 19% in value in 2023-24

2023-24 was a positive year for the Indian Automobile Industry. According to SIAM, the number of vehicles sold grew by 10% year-over-year. This report presents the insights from a ground up study on the market value of Indian Automobile Industry carried out by Primus Partners.

**India Auto Industry Value**
***(in Rs. lac crore)***



# 01 India Automobile Value Report - II

## Growth of the Indian Automobile Industry

Given below is a deep dive into the changes in various automobile segments compared to 2022-23:

- Volume of the **UV + SUV segment** increased by 23%, with average price increasing by 16% and the overall value increasing by a massive 39%. A detailed analysis and breakup of this surge in value is presented in the following chapters.

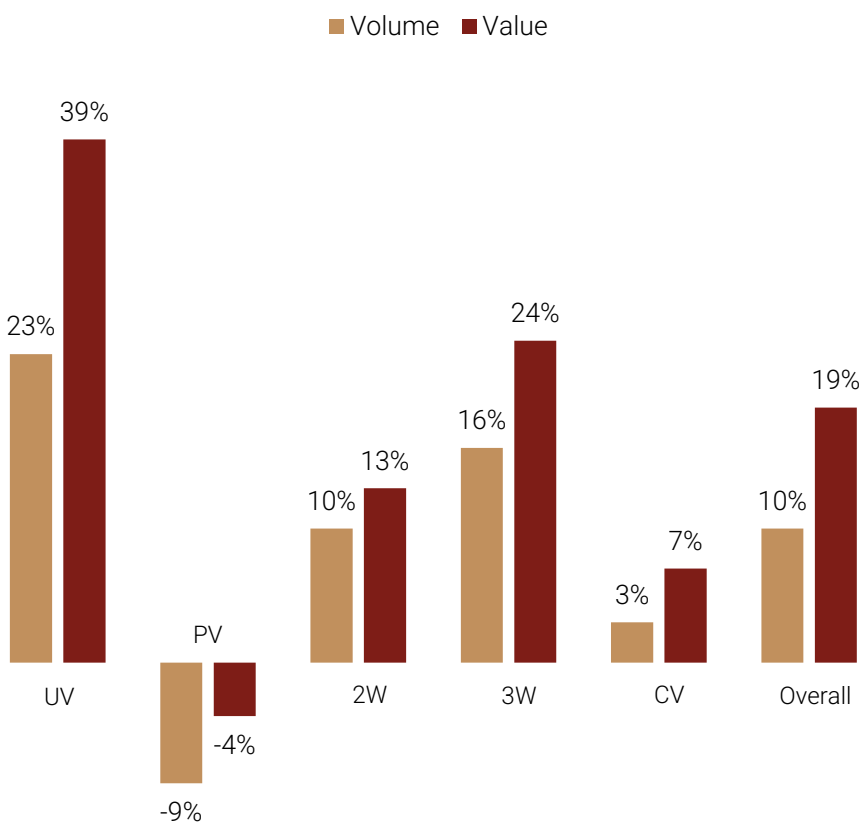
- Volume of **Passenger Vehicles (PV)** or cars decreased by 9%, while price went up by 5% resulting in a decrease of 4% in value. In 2023-24, the market shift from cars to Utility Vehicles (UV) continued.

- Volume of **2 wheelers (2W)** grew by 10%, price increased up by 3% and value rose by 13%.

- Volume of **3 wheelers (3W)** grew by 16%, price increased by 8% and value went up by 24%.

- Volume of **Commercial Vehicles (CV)** grew by 3%, price increased by 4% and value went up by 7%.

**Growth of Indian Automobile Industry**
***2023-24 vs 2022-23***

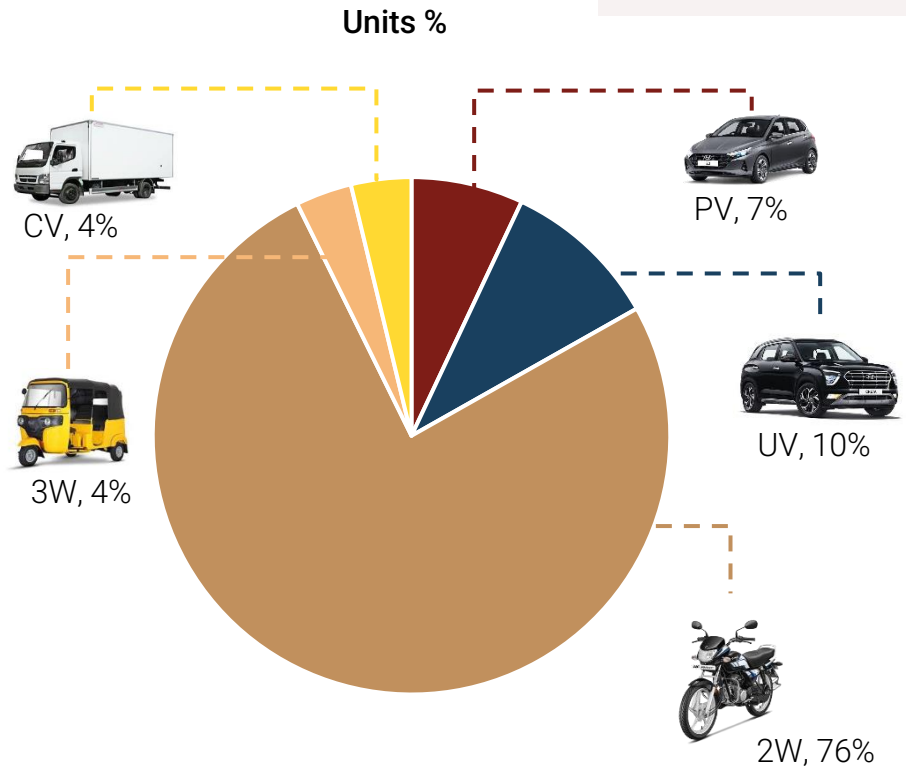



*While India grew 10%(including 2 wheelers) in terms of vehicles produced, in terms of value, it grew by 19%.*

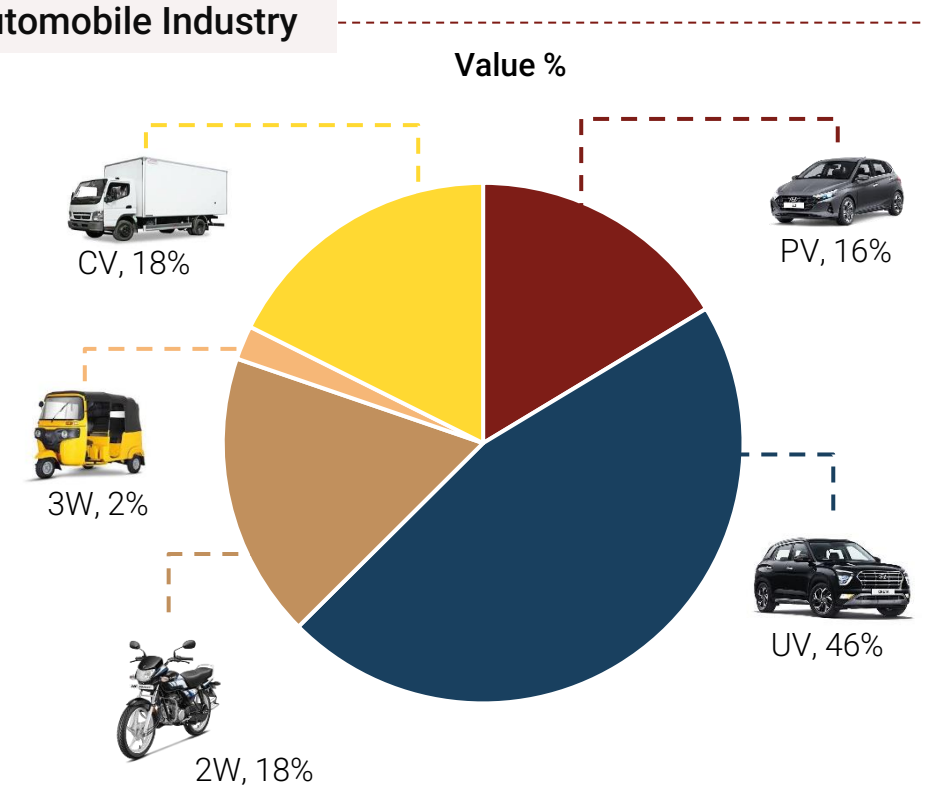
# 01 A. Breakup of INR 10.22 Lac Cr. Industry Value

The automobile industry produced **2.8 crore vehicles** during 2023-24, with two wheelers surpassing other vehicle categories with 76% of production numbers. Four-wheeler passenger vehicles generated the highest Value share which contributed to 63% of the **INR 10.22 lac crore** Value generated by the industry.

## Units vs Value of the Automobile Industry




Total Units (FY 2023-24): 2.82 Crore




Total Value (FY 2023-24): INR 10.22 Lac Crore

7 % of units
16% of Value

### Passenger Vehicles

India is #3 in passenger vehicles production behind China and USA. India is expected to be the fastest growing geography. Passenger vehicle category values over **INR 1.7 lac crore** and accounts for **7% of the volume** and **16% of value.** The key manufacturers in this segment are Maruti, Hyundai, KIA, TATA, Toyota, and Mahindra

10 % of units
46% of Value

### Utility Vehicles

India produced **27.7 lac** utility vehicles that account to **INR 4.72 lac crore**. Furthermore, utility vehicles accounted for **10% of volume** and a significant **46% of value**. The key manufacturers in this segment are TATA, Mahindra & Mahindra, Toyota, and Kia.

76 % of units
18% of Value

### Two-Wheelers

India is #1 country for two-wheeler production, closely matched by China. Over 20 million two-wheelers were produced during the last year, accounting for **76% of the volume** share. The overall segmented accounted **for INR 1.8 lac crore** amounting to **18% of value**. The key manufactures in this segment are Hero Motocorp, Honda Scooters, Bajaj, TVS etc.

4% of units
2% of Value

### Three Wheelers

India produced **9.9 lac** three-wheelers that account to **INR 0.21 lac crore**. Furthermore, three-wheeler accounted for **4% of volume** and **2% of value**. The key manufacturers in this segment are Atul, Mahindra & Mahindra, and Continental Engines.

4 % of units
18% of Value

### Commercial Vehicles

India has produced over **10.66 lac** commercial vehicles ranging from a small 4-wheel carrier with less than 2-ton capacity to large tractor trailers and specialty vehicles like tippers. The commercial vehicles category generates over **INR 1.8 lac crore** and accounts for **4% of volume** and **18% of value**. The key manufacturers in this segment are TATA, Ashok Leyland, Eicher, and BharatBenz.



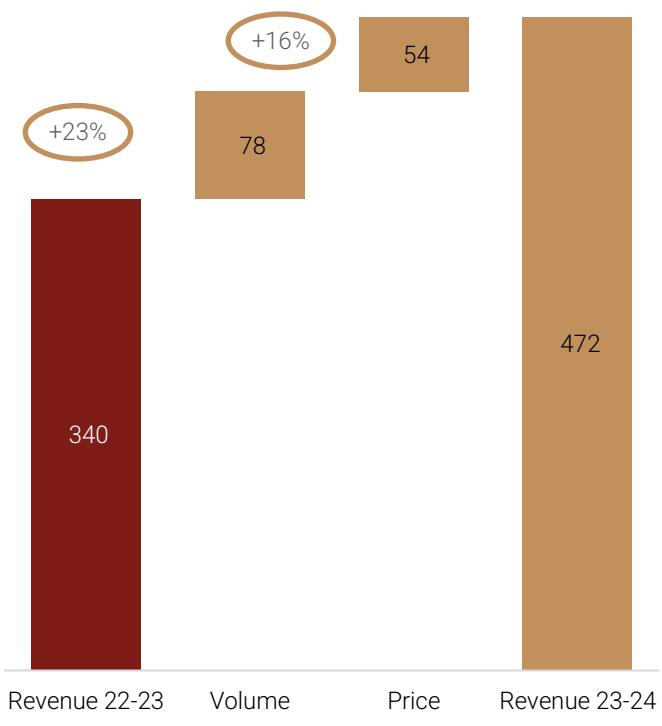

# 01 The Rise and Rise of the UV Segment

## UV / SUV segment has grown 23% in Volume, and 39% in Value

Why are SUV / UV preferred vehicle for Indians?

- The form factor works well – they are roomier, have an upright seating position, and higher luggage capacity
- They have higher ground clearance, which works well for Indian roads having potholes, high speed bumps makes higher ground clearance a preference.
- Many hatchbacks and cars which are not primarily meant for off-road capabilities, are getting a makeover and are getting the form factor of SUVs.
- Their perceived prestige value is higher.
- Rural India is buying more and more vehicles, and prefer SUV / UV

Utility Vehicles Value
(in Rs. 1000's cr)




## UV / SUV Segment has grown 16% in Price

The average price of UV went up by 16%, which is quite a lot for a year. The top 5 reasons for this growth have been :

1. **General Rise in price:** The OEMs were able to dictate series of price rises through the year on back of good demand and limited production
2. **Shift to a higher segment:** Consumers are increasingly shifting towards higher-end UV segments, opting for more premium and luxurious models.
3. **Shift to Hybrid:** Hybrid UVs offer better fuel efficiency and lower emissions, typically come at a premium compared to their conventional counterparts.
4. **Shift to Automatic Gears:** Consumers are willing to pay a premium for the convenience and comfort provided by automatic transmissions.
5. **Popularity of Sunroof:** The increasing demand for sunroofs, now common in mid to high-end UV variants, has driven up the average price of UVs.
6. **Shift to higher variant:** Consumers are increasingly opting for higher variants of UV models, which come with additional features, better technology, and enhanced comfort.
7. **Shift to higher EV:** The growing shift towards higher-end electric UVs with longer ranges and advanced technology has significantly increased the average price.


*Hybrid powertrain*


*Automatic Gear*


*Sunroof*

# 01 Break up of the UV Segment

## UVC

UVC category has seen an increase of 20% in terms of Production, 18% in price and an increase of 48% in Value from last year. This highlights a significant growth in this sub-segment, showing that consumers prefer small-sized SUVs such as Bolero, WR-V, Venue, Exter Sonet etc.

## UV1

UV1 segment has seen an increase of 27% in terms of Production, decrease of 4% in price and an increase of 23% of Value from last year. Examples in segment Hyrider, Ertiga, Creta, Elevate

## UV2

UV2 segment has seen an increase of 21% in terms of Production, and an increase of 50% in Value from last year. Examples in segment Alcazar, Hector, Harrier

## UV3

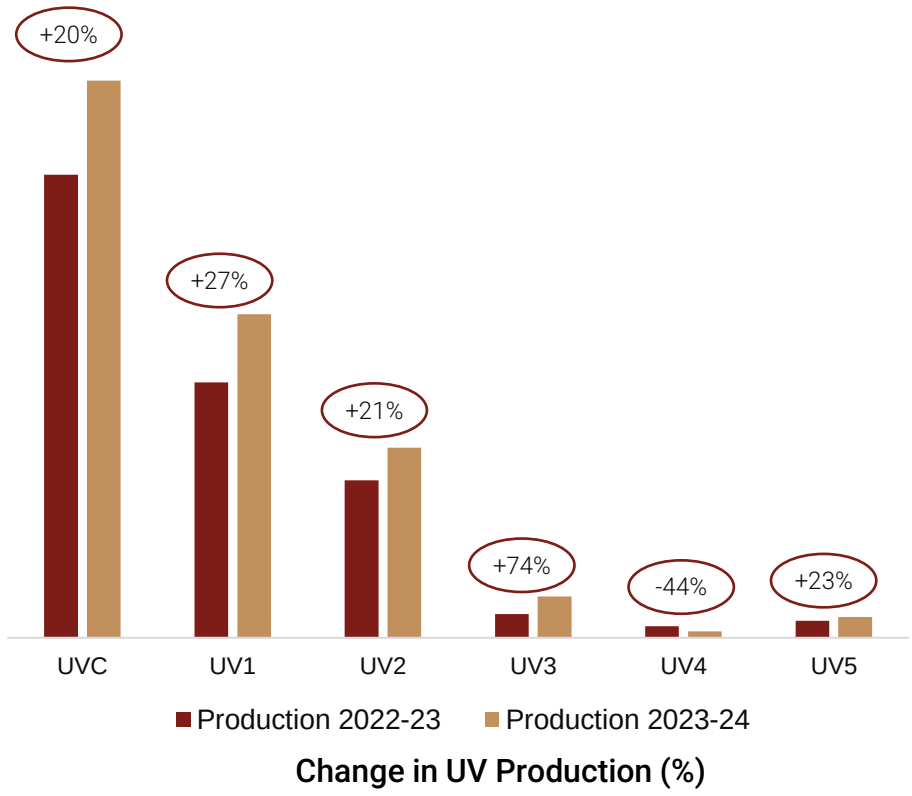
UV3 segment has seen an increase of 74% in terms of Production, 8% in price and an increase of 82% in Value from last year. Examples in segment Innova, Trax

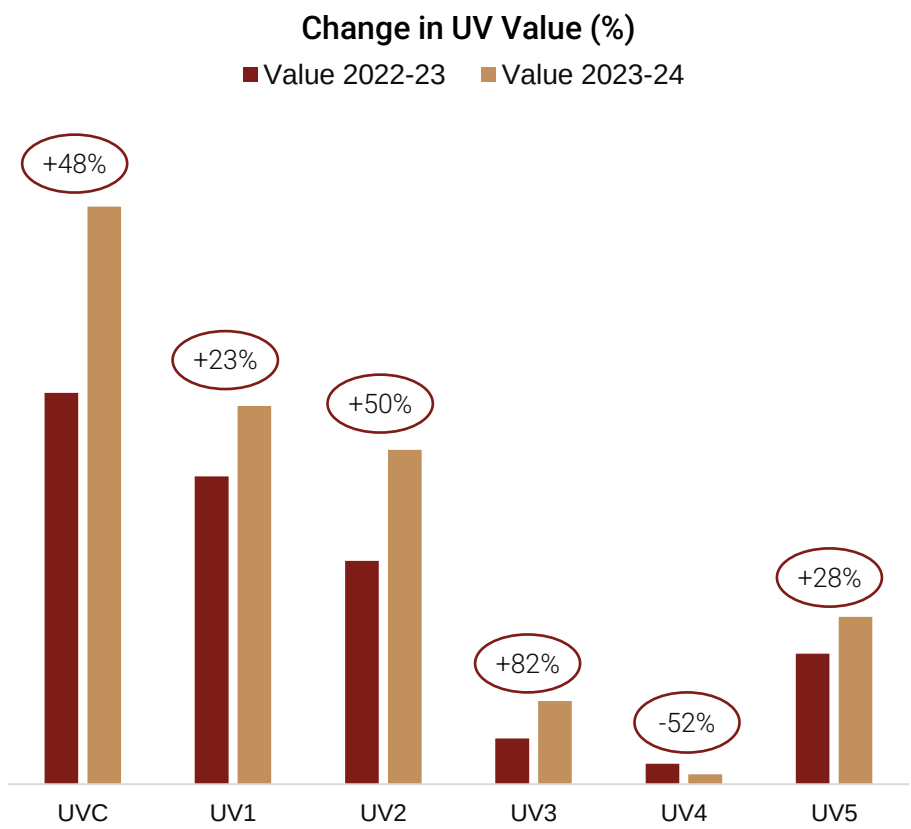
## UV4

UV4 segment has seen a decrease of 44% in terms of Production, and a decrease of 52% in Value from last year. Even though the category saw addition of new SUV models (Gurkha, MU-X), the decrease signifies that consumers are moving away from large SUVs towards smaller ones.

## UV5

UV2 segment has seen an increase of 23% in terms of Production, 5% in price and an increase of 28% in Value from last year. Examples in segment Fortuner, Kodiaq, Gloster, Meridian.




# 02 Bharat Stage 7 Emission Norms

## Global Emission Standards

There are 3 main groups of emission norms in the World :

- **European Emission Standards (Euro)** - applicable in 27 EU members + UK.
- India (BS), China, Brazil emission norms are based on Euro Norms
- **US Environmental Protection Agency (EPA)** - applicable in USA, Canada. Mexico NOM are harmonized with US EPA. Typically EPA are less stringent than Euro.
- **Society of Automotive Engineers of Japan (JSAE)** - applicable In Japan
- **International Harmonization of Automotive Technical Standards by UN** - - has been ratified by EU and 37 countries. However, the countries are only required to make an effort to incorporate Global Technical Regulations.


*Key Emission Standards by Country*

## European Emission Standards Timelines

The first proposal of Euro 7 norms was presented in Nov 2022, and after many rounds of debate, The European Parliament and the Council approved the Euro 7 regulations in April 2024 and the same was notified on the journal in May 2024 through Regulation (EU) 2024/1257 Read more

- **Timelines** – Euro 7 will be applicable on new type of cars and vans by May 2025, and all cars and vans by November 2026. The buses and lorries will also be covered from November 2026.

| Euro Norms | Bharat Norms |
|---|---|
| Euro-6 - 2014 | BS-6 - 2020 |
| Euro-6a - 2017 | BS-6a - 2023 |
| Euro-7 - 2025 | BS-7 – Euro-7 +few months |

*India leapfrogged from BS4 to BS6, skipping BS5. In 2023, India adopted 6a norms ie inclusion of real driving emission (RDE) standards in 2023. It is now at par with Europe, and is likely to keep pace.*

## New Items in Euro 7 Regulations

### Non Tail Pipe Emissions

- Limits for emission from brakes. Brake particle emission test has been prescribed and limits have been set at 3mg/km per vehicle for PM10 particles.
- Rules on microplastic pollution from Tyres. Abrasion will have to be measured, and be within prescribed limits.

*Brake pads wear out, leaving brake dust containing iron, copper, titanium and magnesium, which are known to cause stress and harm to human cells*

*Tyre wear contribute to microplastic as well as nanoplastic pollution. Both are known to harm humans and environment.*
*Electric vehicles are heavier and use softer grade of tyres that wear faster. By limiting their wear, Euro 7 aims to address the issue before it becomes big*

# 02 Bharat Stage 7 Emission Norms

## New Items in Euro 7 Regulations …

**Stricter Emission Tests & Longevity :**

**Vehicles need to comply with emission rules for longer period** – 100,000km/5 years in Euro 6 norms to 200,000 km / 10 years for Euro 7.

- More effective emission tests
- Digital Monitoring of compliance
- Better market surveillance tests


*Euro 7 vehicles will need to be equipped with on-board emission monitoring system (OBM) that will use sensors to measure emissions throughout the lifetime of a vehicle*

*Euro 7 will have the same limits for carbon monoxide, total hydrocarbons, non methane hydrocarbons, oxides of nitrogen, particulate matters etc. irrespective of the fuel.*


**For internal combustion engine vehicles**

- Fuel and technology neutral emission limits (same for petrol / diesel / CNG etc.)
- Regulating additional pollutants – Ammonia, non methane hydrocarbons
- On-road tests with broader range of driving conditions

**For electric and plugin hybrid vehicles**

Battery durability Minimum performance requirements:

- 80% for 5 years / 100,000 km
- 72% for 8 years / 160,000 km

*EV batteries use a lot of rare materials like lithium and contain elements like cobalt, manganese and nickel which do not degrade on their own. By putting durability requirements, Euro 7 norms aim to bring down pollution from end of life batteries*

## Expected Impact

The expected impact by implementing Euro 7 rules over Euro 6 are

- **37% reduction in NOx**- from cars and vans
- **56% reduction in NOx**- from buses and lorries
- **13% reduction in particulates**- from cars and vans
- **39% reduction in particulates**- from buses and lorries
- **27% reduction in particles** – from brakes of cars and vans


*Oxides of Nitrogen (Nox) contribute to formation of smog and acid rain.*

*Particulates are known to cause irritation in eyes, nose, throat, and lungs*

*Microplastics are linked to neurological conditions, poor cardiometabolic health and fertility issues*

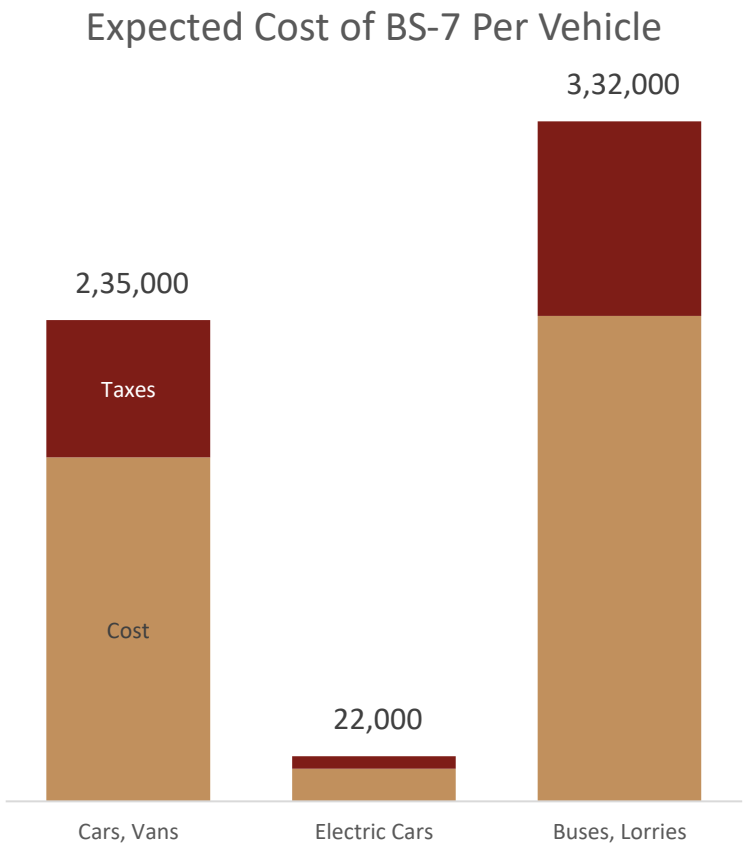
# 02 Bharat Stage 7 Emission Norms

## Debates on Euro 7 Regulations …

### Expected Cost

Euro 7 norms will add to the cost of ownership of vehicles. According to ACEA, direct incremental cost of Euro 7 as a result of exhaust emissions control systems , evaporative emissions control systems, on-board diagnostics and monitoring, battery durability, brake emissions, investment costs & type approval costs would be Euro 1,862 per car or van. Add the high taxation in India, and it will translate to Rs 2.35 lac per vehicle, which is quite a jump.

Different studies put the expected costs higher as well as lower, but one thing is for sure – it will cost consumers more




*Where should the Auto industry spend its R&D dollars? On EVs which are the future or ICE or both?*

### Debate over Electrification

The auto industry is making significant investments for electrification of the drive trains. By putting difficult to achieve emission norms, substantial money will have to be diverted for R&D and commercialization of new technologies.

The counter argument is that most of the new items introduced are achievable through existing technologies. Many of the initial suggestions given in 2022 have been watered down.

# 03 Policy News

## New Driving License Rules 2024: All you need to know

*May 22, 2024*

MoRTH announced new driving license rules applicable from June 1, 2024. Major changes include removal of mandatory driving test at RTO, increase in penalties for driving without a valid license, and revised guidelines for private driving schools.

Read more

## New EV Policy defines minimum investment at Rs 4,150 Cr, customs duty lowered for limited import

*May 15, 2024*

The new EV Policy offers duty concessions for global EV companies setting up manufacturing units in India. Eligibility criteria and norms include minimum investment of INR 4,150 Cr and manufacturing to begin within 3 years.

Read more

## Vehicle Scrappage Policy: States Offering Rebates For Scrapping Your Old Car

*May 3, 2024*

Under the new Vehicle Scrappage Policy, several states including Bihar, Madhya Pradesh, Uttar Pradesh, Haryana, Karnataka, Maharashtra, Gujarat, Punjab and Kerala have announced concessions to reduce environmental impact and rejuvenate the automobile sector.

Read more

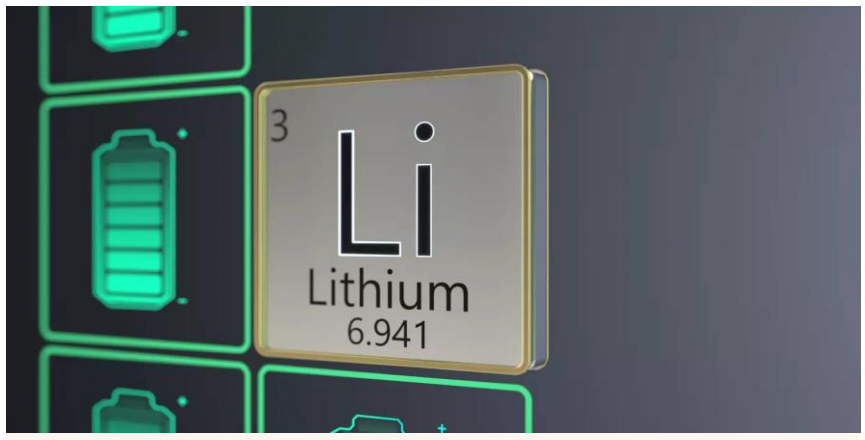
## Budget 2024: Auto industry welcomes expansion of EV ecosystem

*February 1, 2024*

The Budget for FY 2024-25 had focus on clean and green mobility including support for e-buses and enhanced EV manufacturing and charging infrastructure. The budget for the PLI scheme was increased to Rs. 3,500 Cr from Rs. 483.77 Cr to boost domestic production.

Read more

## 03 Policy News (contd.)




### Delhi govt notifies cab aggregator policy, fleets to switch to electric

*November 30, 2023*

The Delhi Motor Vehicle Aggregator and Delivery Service Provider Scheme mandates cab aggregators and delivery services to shift entirely to EVs by 2030. The policy extends to 2W, 3W, and 4W necessitating to establish a 24x7 'command and control centre'.

Read more

### India establishes world's first charging standard for e-two and three wheelers

*October 18, 2023*

NITI Aayog, the DoST, ARAI, EV makers and the BIS collaborated to create country's first indigenously developed AC and DC Combined Charging connector standard for light electric vehicles (LEVs), which has the potential to be implemented globally.

Read more

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## Disclaimer


**PASSION**
for providing solutions to help clients achieve their goals

**RESPECT**
for all and alternate viewpoints

**INTEGRITY**
of thoughts and actions

**MASTERY**
of our chosen subject to drive innovative and insightful solutions

**US**
representing the Primus collective, where each individual matters

**STEWARDSHIP**
for building a better tomorrow

# About Primus Partners

Primus Partners has been set up to partner with clients in 'navigating' India, by experts with decades of experience in doing so for large global firms. Set up on the principle of 'Idea Realization', it brings to bear 'experience in action'. 'Idea Realization'— a unique approach to examine futuristic ideas required for the growth of an organization or a sector or geography, from the perspective of assured on ground implementability. Our core strength comes from our founding partners, who are goal-oriented, with extensive hands-on experience and subject-matter expertise, which is well recognized in the industry. Our core founders form a diverse cohort of leaders from both genders with experience across industries (Public Sector, Healthcare, Transport, Education, etc.), and with varied specialization (engineers, lawyers, tax professionals, management, etc.).

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