



# INDIAN EV SECTOR OVERVIEW

A comprehensive market analysis by:  
The India Watch



# MARKET OVERVIEW

- India's e-mobility sector is growing fast. The necessity for clean travel has been instrumental behind growing popularity of Electric Vehicles (EV) in the country.
- It has been projected that by 2030, there will be ten million EVs on the roads. Two-wheelers and three-wheelers are driving the initial growth, followed by passenger cars and commercial vehicles.
- Moreover, Indian market witnesses an increased demand for electric vehicles because they save money. Speaking of cost per kilometer travelled, a petrol/diesel car goes at Rs 7-8 while EV goes at around Rs 1-1.5 per kilometer.
- The government aims for EV adoption to reach 40% for buses, 30% for private cars, 70% for commercial vehicles, and 80% for two-wheelers by 2030.





**OLA**  
**ELECTRIC**



**HERO**eLECTRIC  
The smart move

## RISE OF EVS IN INDIA

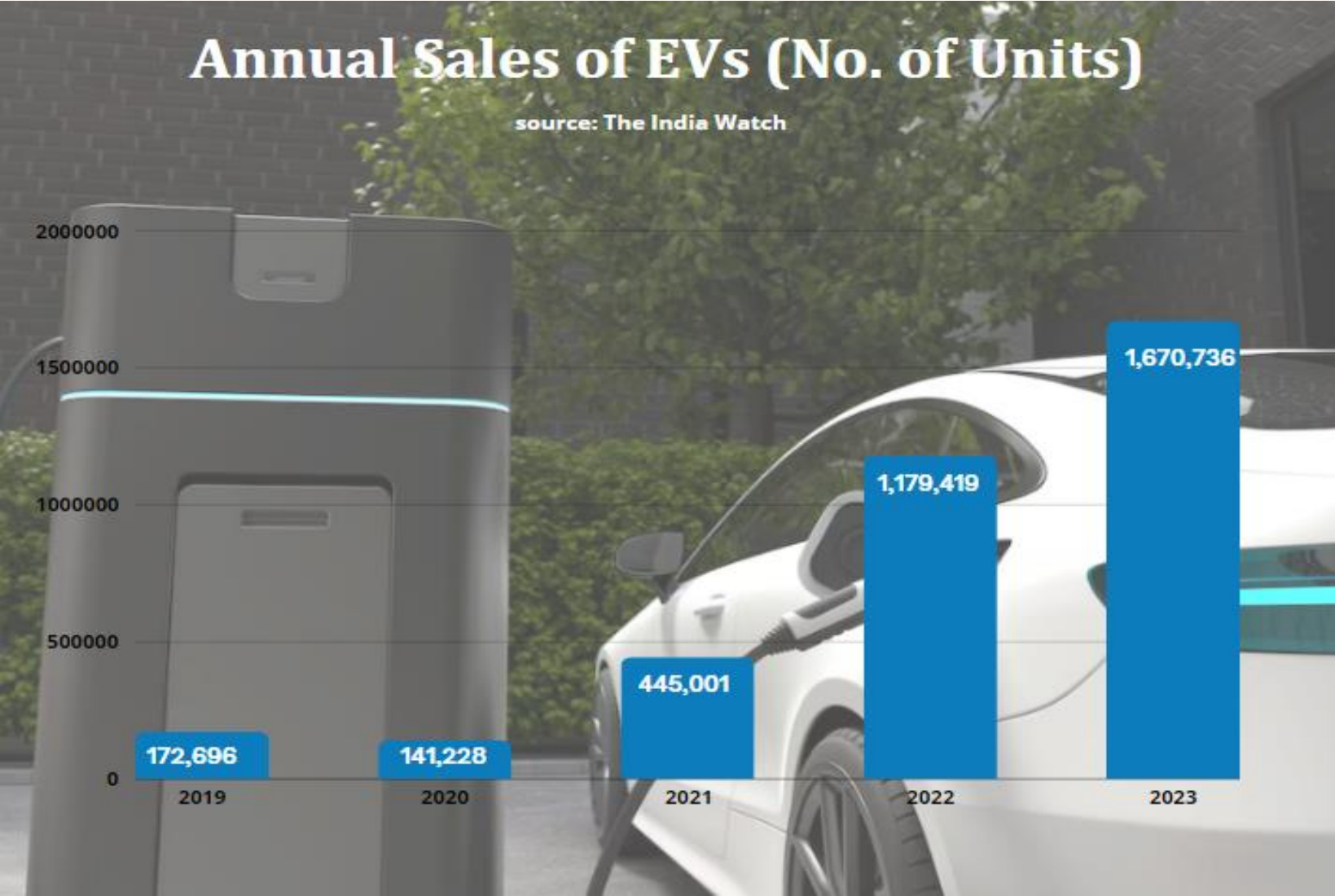
- The Indian electric vehicle (EV) market is witnessing a strong growth in all segments, which include cars, two-wheelers and three-wheelers. For FY23, the overall sales of 1,670,736 units were registered, which is equivalent to a growth rate of 42.6% compared to FY22.
- The strongest increase was noticed in Electric Two- Wheelers that rose by nearly half reaching 49% from FY22 to FY23.
- In terms of registered vehicle sales, Ola Electric, Hero Electric and Okinawa AutoTech are the top three players, accounting for over 45% market share.
- The Indian market for EVs is expected to reach \$266bn by 2030 at an annual growth rate of around 94.4% as stated by Nitin Gadkari India's Minister of Road Transport and Highways during an interview.



# MARKET GROWTH DRIVERS

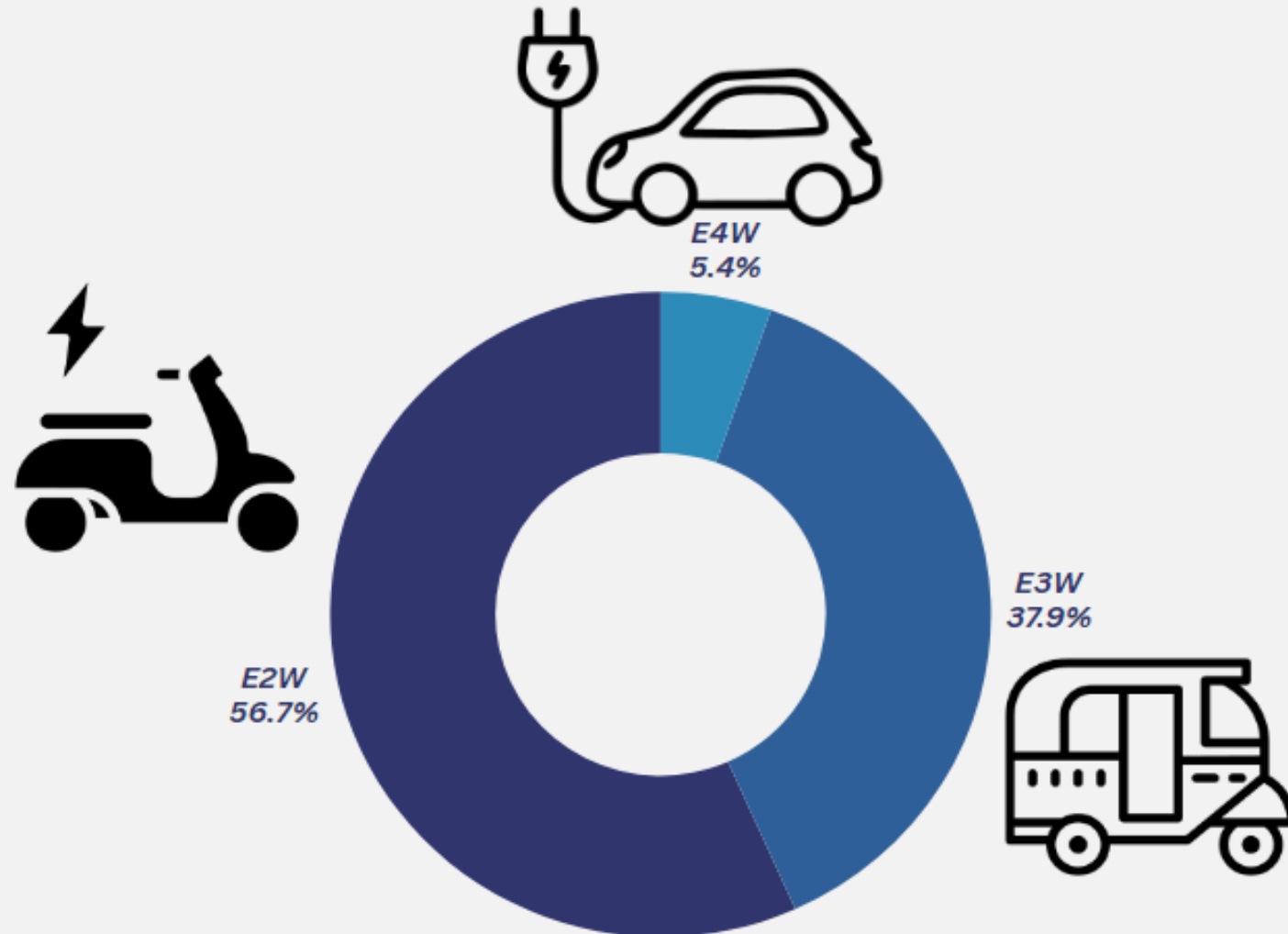
- 1 India's young tech generation is more embracing towards electric vehicles considering the future that they would like to have.
- 2 Under FAME scheme sponsored by GOI, subsidies have been provided on purchase of EVs which has greatly reduced the upfront costs making them affordable for people. FAME II subsidy was capped at approximately 40% ex-factory price earlier.
- 3 The increase in fuel prices makes electric vehicles cheaper for a huge consumer base automatically. It will cost you between Rs 1 and Rs1.5 per kilometer if you use an electric vehicle thus it is pocket friendly compared to other alternatives.
- 4 Improvements in battery technology play a key role here, as there are new batteries with lower weight, faster charging, and higher energy density. According to Deloitte India survey, 72% Indians may purchase an electric car within two years.

# Annual Sales of EVs



## Break up of 2 W/ 3W/ 4 W

### VEHICLE-WISE BREAKUP (NO. OF UNITS SOLD)



SOURCE: THE INDIA WATCH ANALYSIS

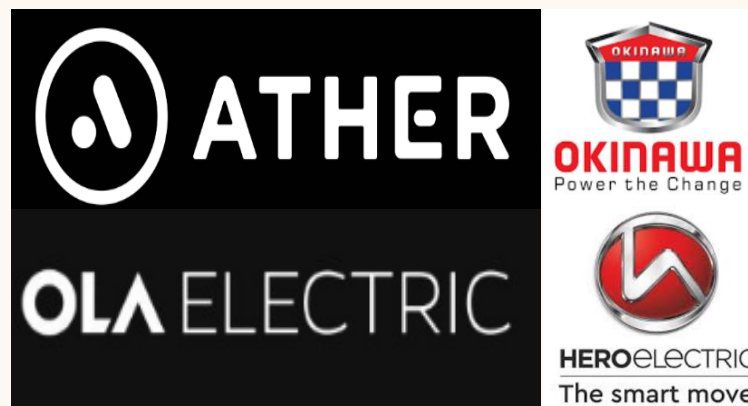
# MAJOR PLAYERS ACROSS 2 W/ 3W/ 4W

## E4W



Electric-4 Wheelers is a nascent segment with an expected growth of 116 percent in FY23 as opposed to FY22. The clear leader is Tata Motors capturing about 82.6% market share during year ending March'2023.

## E2W



Ola Electric dominates the market with 54,000 registrations in March 2024. Hero Electric offers a wide range of affordable scooters. Okinawa AutoTech focuses on stylish and performance-oriented models. Ather Energy is known for its advanced technology and premium offerings.

## E3W



In 2024, the E3W segment in India saw an exponential increase in no. of sales, with the passenger segment growing by 53% and the cargo segment growing by 83% year-on-year. Mahindra was the leader of the segment and attained YoY growth of 69%.

# OTHER MAJOR PLAYERS IN THE VALUE CHAIN

## Charging Stations



Tata Power, Bolt, Ather offers charging infrastructures for EV Industry. For example, Bolt which is leading has already installed 23K fast & slow charge points.

## Batteries



Indian EV battery business is currently booming due to rising demand of electrical automotive technology running on batteries. The Indian government is actively promoting the growth of the ACC industry. To this end, the government has introduced a PLI scheme with an allocation of ₹180 billion to encourage domestic battery manufacturing.





## GOVERNMENT POLICIES TO SUPPORT EV

It is the intention of GOI to change to electric vehicles by 2030. It is their hope that global warming will be limited to 1.5°C. The Paris Agreement had 192 countries including India as its members. For this reason, some green gas emissions are reduced by the agreement, and it thus seems to promote using EVs. As such, subsidizing public transportation for two-wheelers, three-wheelers and buses has become a focus area of Indian government.

### THE PARIS AGREEMENT

#### FAME

This is a major step taken by the Indian government to encourage electric vehicles. This measure has been divided into two phases, FAME I (2015 – 2019) and FAME II (2019 – till date), which offer incentives on purchasing electric vehicles. The plan includes perks offered for buying plug-in hybrid and pure EVs of up to ₹29,000 per unit for two-wheelers and ₹1.38 lakh per unit for four-wheelers.

In early 2021, the government rolled out its Go Electric drive aiming at encouraging the adoption of electric mobility devices. No registration fees were required for EVs, plus tax holidays were also suggested.

### GO ELECTRIC CAMPAIGN

#### NEMMP

To achieve national fuel security improvement through hybrid and electric vehicle adoption, the Indian government introduced the plan in 2012. By 2030 NEMMP targets a penetration rate of electric vehicles of about 30 percent (The current is around 6%). Even though NEMMP 2020 initial sales target of six-seven million EVs was not fully fulfilled, there is strong growth within the Indian EV market.



### HIGH INITIAL COST

Add The high initial cost of electric vehicles (EVs) compared to traditional vehicles is among the major obstacles. The report by BloombergNEF states that the average selling price of an electric vehicle in India in 2020 was roughly \$20,000, a lot higher than that of a conventional internal combustion engine vehicle.



### LIMITED CHARGING INFRASTRUCTURE

Absence of proper charging infrastructure is one major barrier to electric vehicle (EV) adoption. Unlike over 70,000 gas stations that exist across India as of January 2022, there were only about 2,000 public EV charging points. Since they are few and hardly located near highways; owners of EVs find it difficult to locate charging facilities especially during long distance journeys.



### RANGE ANXIETY

The concern about running low on battery while driving, remains a major hurdle to widespread EV adoption in India. A survey conducted by Ola Electric revealed that approximately 70% of potential EV buyers cited range anxiety as a major factor hindering their purchase decision.



### CONSUMER AWARENESS AND EDUCATION

A huge percentage of the Indian population remains unaware with EVs, their advantages, and the available options. According to a Deloitte survey, approximately 64% of Indian consumers exhibit limited knowledge regarding EVs.

# CHALLENGES IN THE SECTOR



## HOW THE INDIA WATCH CAN HELP ?



Feasibility study reports for EV industry and its verticals.

Consumer behaviour surveys (quantitative, qualitative, mixed) to gain valuable insights

Customer satisfaction surveys, brand perception & benchmarking surveys, etc

Strategic intelligence and market knowledge for brands looking to expand and scale up

Pitch decks, investor reports, corporate presentation for clients



# THANK YOU !

## ABOUT US

The India Watch is an independent Market Research and Feasibility Study advisory. Through our customized research solutions, we help Corporates, Entrepreneurs, Sovereign Agencies, Family Offices, and institutional investors to make informed business decisions. We have in-depth expertise across a range of sectors such as Manufacturing, Infrastructure & Real Estate, Consumer Retail, Technology, E-commerce, F&B, Hospitality & Wellness, Lifestyle, Agribusiness, Shipping & Logistics, etc.

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