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**RIVIAN'S ELECTRIC
DELIVERY VANS**



**INDIA EV SALES
DEC 2024**

**TOP MONEY
MOVEMENT IN
MOBILITY WORLD**



**NEWS, JOINT
VENTURES &
PARTNERSHIPS**



UPCOMING EV SHOW

GYANIKI ACCESS



GYANIKI REPORTS

'gyaniki' undertakes specialized and customized research in the areas of Future Mobility.
'gyaniki' provides an online repository for understanding the mobility ecosystem.
'gyaniki' database covers manufacturers, suppliers, technologies and ecosystem players in mobility including Electric, Autonomous, ADAS, Connected and Shared vehicles.
'gyaniki' also provides training programs across mobility domains.

Rivian's Electric Delivery Vans



Rivian, the innovative electric vehicle startup, has made significant strides in the commercial delivery sector with its **Electric Delivery Van (EDV)**. This cutting-edge vehicle is tailored for e-commerce and logistics platforms, positioning Rivian as a formidable competitor against established industry giants. One of Rivian's most notable partnerships is with Amazon, which has placed an impressive order for **100,000 units** of the EDV. This monumental deal not only underscores **Amazon's** confidence in Rivian's capabilities but also ensures a steady production line for Rivian until 2030, having already delivered **20,000 units** that are currently operational in the **USA and Germany**.



In a strategic move to expand its market reach, Rivian ended its exclusivity agreement with Amazon in November 2023. This pivotal decision allows Rivian to offer its platform and the full EDV to a broader customer base. One of the first companies to seize this opportunity is **JB Poindexter & Co.**, which has developed the **Morgan Olson C250e**, an electric van designed for the Canada postal service. This new model is built on Rivian's platform and incorporates Rivian's user interface, software, and steering wheel, showcasing the versatility and adaptability of Rivian's technology.

Rivian currently offers two configurations of its delivery van: **Delivery 500 and Delivery 700**. Below are the specifications for each model:

Model	Payload Capacity	Gross Vehicle Weight Rating (GVWR)	Range on Full Charge
Delivery 500	2,734 lbs (1,240 kg)	9,350 lbs (4,241 kg)	161 miles (259 km)
Delivery 700	2,513 lbs (1,140 kg)	9,500 lbs (4,309 kg)	153 miles (246 km)

Both models are powered by advanced lithium iron phosphate (LFP) batteries, ensuring longevity and efficient charging capabilities of up to **100 kW**. This technological advantage makes the Rivian EDV a reliable choice for delivery services that demand efficiency and performance.

The design of the **Rivian EDV** emphasizes safety and driver comfort. Features such as a large windshield for enhanced visibility, automatic emergency braking, adaptive cruise control, and collision warnings are integrated to protect both drivers and pedestrians. Additionally, the vans are equipped with advanced technology that streamlines delivery workflows by providing seamless access to routing and navigation.

Rivian's success with its EDV has sparked interest among legacy manufacturers who are now racing to develop their own electric delivery vehicles. Companies like GM with its BrightDrop division, Ford Pro, and Renault are responding to the growing demand for sustainable delivery solutions by innovating their electric van offerings.

The transition towards electric delivery vans is not just a trend; it represents a significant shift in how goods will be transported in urban environments. With Rivian leading the charge through its Electric Delivery Van, the future of logistics is poised to become more sustainable and efficient.

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1 Whats' Inside

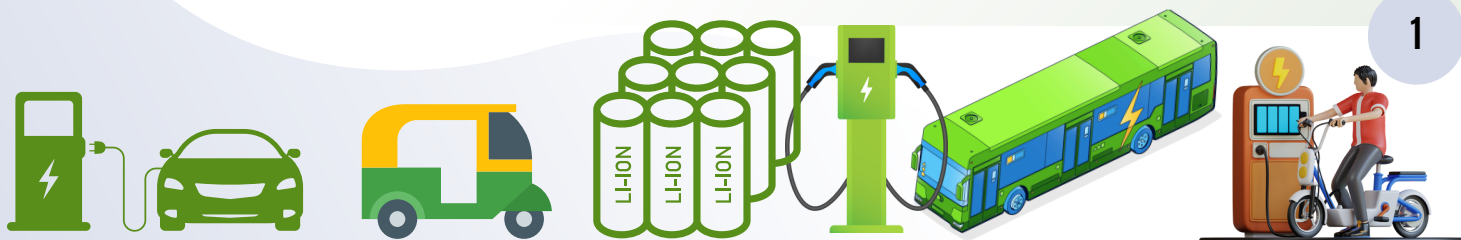
2 Rivian's Electric Delivery Vans

1 Whats' Inside

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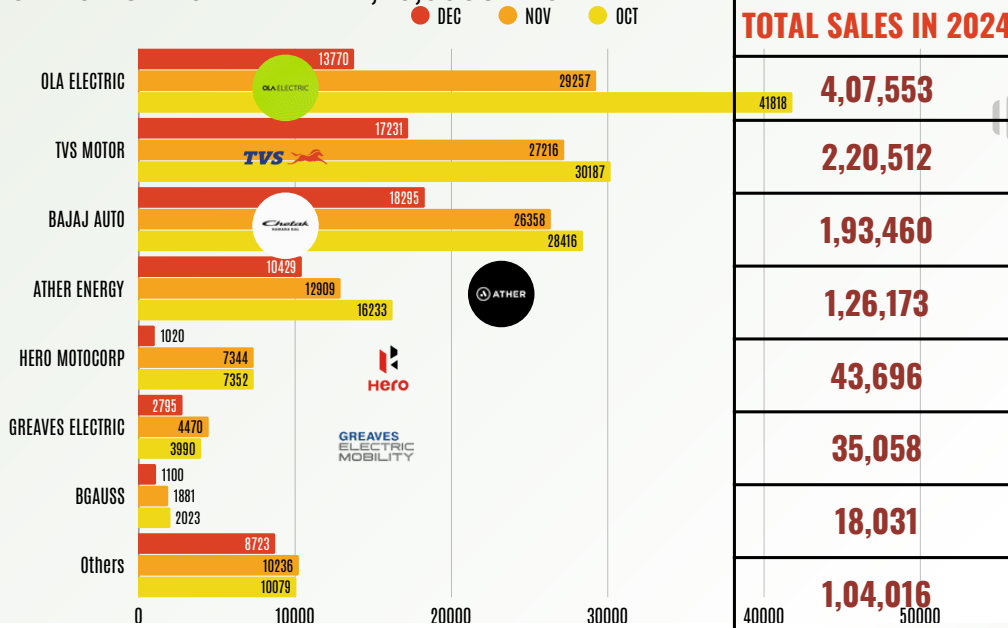




India EV Sales NOV 2024

TOP EV-2W Sales by OEM

SALES NOV 2024 INDIA - 1,40,098 UNITS



TOTAL SALES IN 2024

4,07,553

2,20,512

1,93,460

1,26,173

43,696

35,058

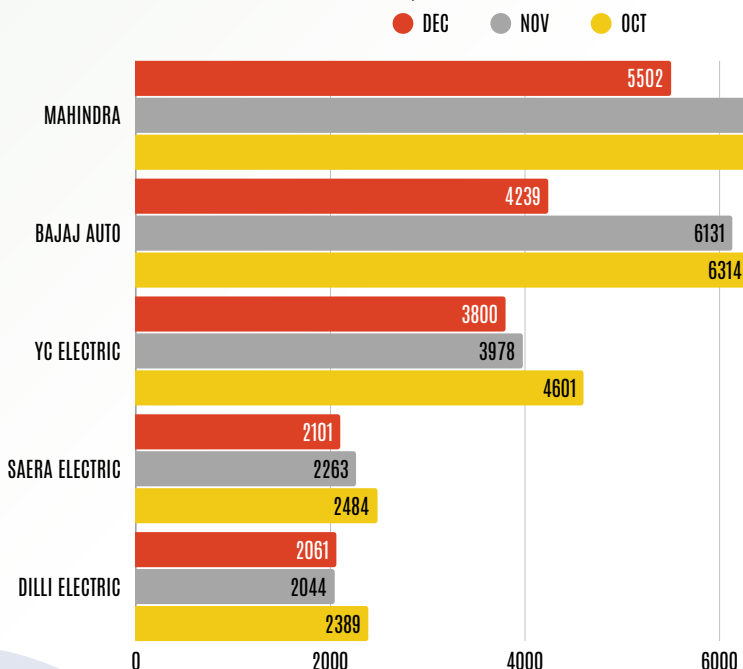
18,031

1,04,016

The electric two-wheeler (E2W) segment is powering the Indian EV revolution, achieving unprecedented growth in CY2024! With a remarkable 33% surge in sales, the industry hit 1.14 million units, contributing to a significant 59% share of the total EV market in India.

EV 3W Sales Trend by OEM

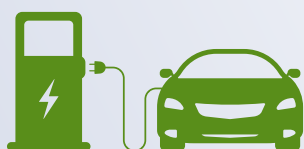
SALES NOV 2024 INDIA - 67,171 UNITS



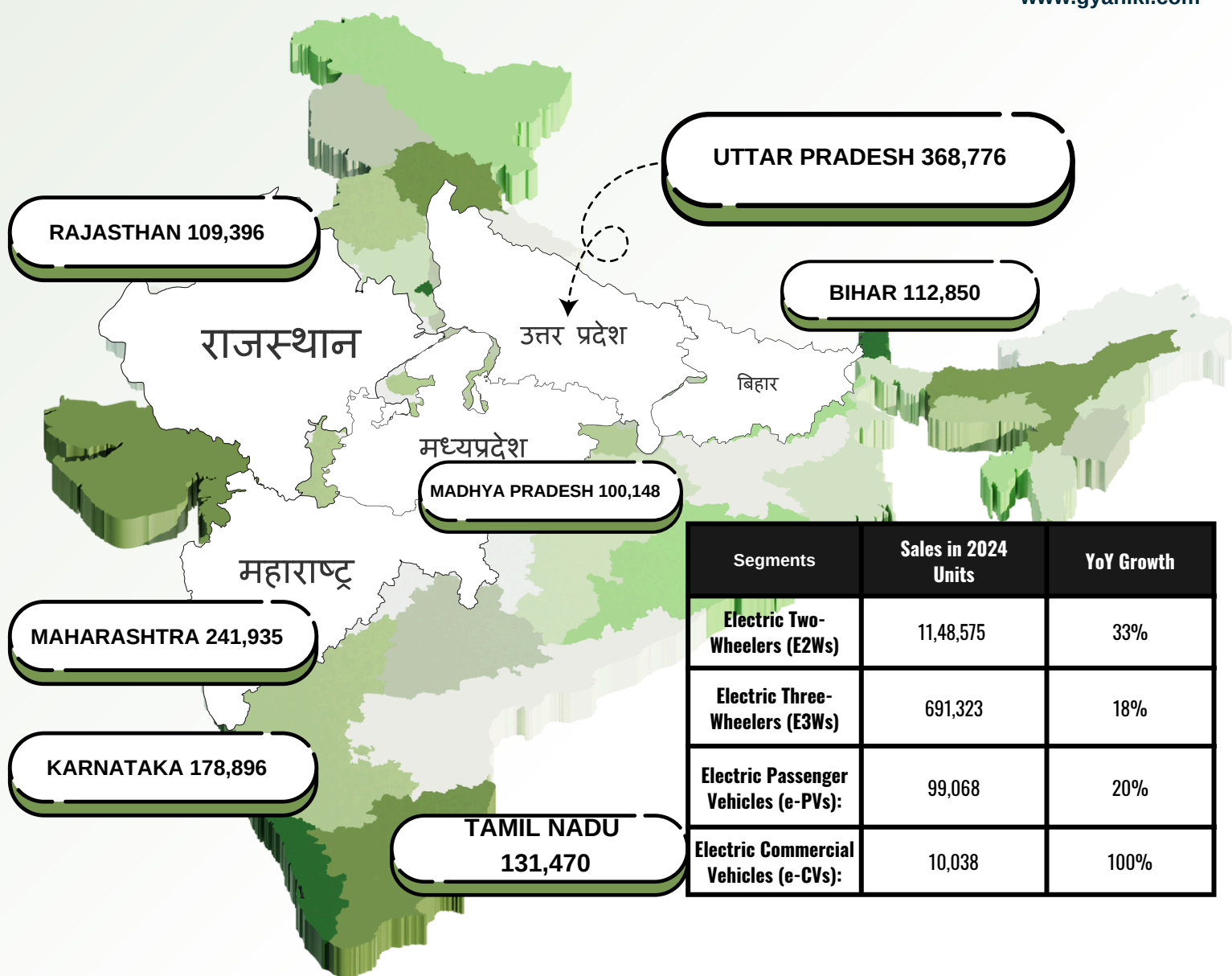
OEM	Units Sold in 2024	YoY Growth	Market Share
Mahindra	68,000	25%	10%
Bajaj Auto	41,879	816%	6%
YC Electric	43,977	8%	6.36%
Saera Electric Auto	28,294	-4%	4%
Piaggio Vehicles	21,762	3%	3%

The electric three-wheeler (3W) segment in India has hit an incredible milestone, with record sales of 691,000 units in 2024—accounting for 56% of the total 1.22 million three-wheelers sold.

Mahindra Last Mile Mobility retained its leadership with 68,000 units sold (10% market share), reflecting a 25% YoY growth. Bajaj Auto emerged as a rising star, securing 3rd place with 41,879 units sold—an astounding 816% growth compared to 2023!



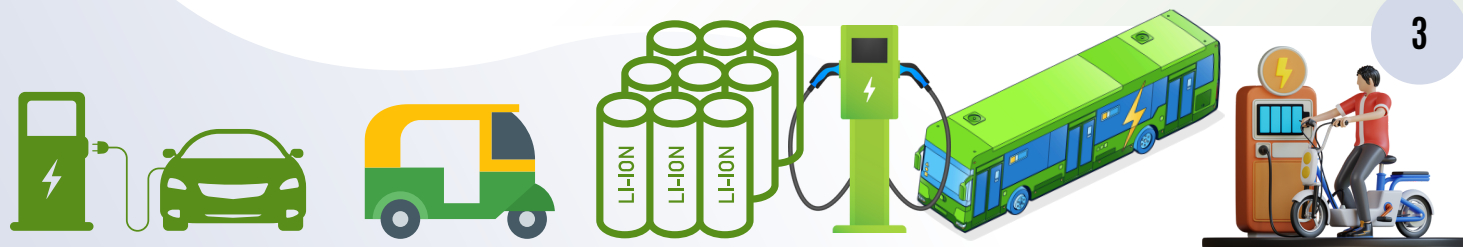
State Wise EV Sales in 2024



Segments	Sales in 2024 Units	YoY Growth
Electric Two-Wheelers (E2Ws)	11,48,575	33%
Electric Three-Wheelers (E3Ws)	691,323	18%
Electric Passenger Vehicles (e-PVs):	99,068	20%
Electric Commercial Vehicles (e-CVs):	10,038	100%

India's electric vehicle (EV) sector has witnessed an impressive surge in sales during the calendar year 2024, with India Electric Vehicle Inc. reporting a total of **19,49,182 units sold**, marking a remarkable **27% year-on-year increase** from **15,32,386 units in 2023**. This growth trajectory underscores the increasing adoption of electric mobility across the nation and reflects the robust demand for sustainable transportation solutions.

In 2024, the Indian EV market experienced an average of **5,325 EVs sold daily**. electric two-wheelers (E2Ws) dominated the market with a 59% share, while electric three-wheelers (E3Ws) accounted for 35%. The electric passenger vehicle (e-PV) segment contributed 5%, and electric commercial vehicles (e-CVs) made up 0.51% of total sales.



India's Electric 2W Market: A Comprehensive Overview (CY2024)



Electric Two-Wheelers Drive India's EV Revolution

The Indian electric two-wheeler (E2W) market reached a new milestone in CY2024, achieving sales of 1.14 million units, a 33% year-on-year (YoY) growth from CY2023's 860,418 units. This remarkable growth saw E2Ws capture a dominant 59% share of the country's total EV market, up from 56% in 2023.

Sustained demand from personal and fleet users, coupled with an influx of new, affordable, and eco-friendly models, contributed to the segment's strong performance. The electric scooter and motorcycle market emerged as a key driver behind the near-record 1.94 million total EV sales in India, which saw a 27% YoY increase across all vehicle segments.

Ola Electric Maintains Leadership

- CY2024 Sales: 407,547 units, up 52% YoY || Market Share: 35%

Ola Electric solidified its position as the market leader, posting record-breaking sales for the second consecutive year. Its wide range of products and aggressive pricing strategies continued to attract both personal and fleet buyers.

TVS Motor Company: Consistent Growth

- CY2024 Sales: 220,472 units, up 32% YoY || Market Share: 19%

TVS retained its second spot, with its iQube series gaining widespread popularity. Its consistent focus on innovation and expanding its EV lineup helped maintain its market share.

Bajaj Auto: A Phenomenal Surge

CY2024 Sales: 193,439 units, up 169% YoY || Market Share: 17%

Bajaj Auto recorded its best-ever performance, driven by the success of its Chetak EV. This 169% YoY growth propelled Bajaj to the third spot in the market, a notable leap from its 8% share in 2023.

Ather Energy: Steady Performer

- CY2024 Sales: 126,165 units, up 20% YoY || Market Share: 11%

Ather Energy saw steady growth, with its focus on premium electric scooters and improved charging infrastructure enhancing customer confidence.

Hero MotoCorp: Exceptional Growth

- CY2024 Sales: 43,693 units, up 292% YoY || Market Share: 4%

Hero MotoCorp's aggressive entry into the E2W space paid off, with sales skyrocketing by nearly 300%. Its competitive pricing and extensive dealer network were key enablers of this growth.

Greaves Electric Mobility: Growth in Fleet Segment

- CY2024 Sales: 35,058 units, up 46% YoY || Market Share: 3%
- Greaves Electric Mobility continued to make strides, particularly in the fleet segment, with its affordable and reliable models.

Revolt Motors: Gaining Traction

- CY2024 Sales: 9,951 units, up 43% YoY || Market Share: 0.86%

Revolt Motors saw increased demand for its electric motorcycles, marking a significant recovery from its downturn in 2023.

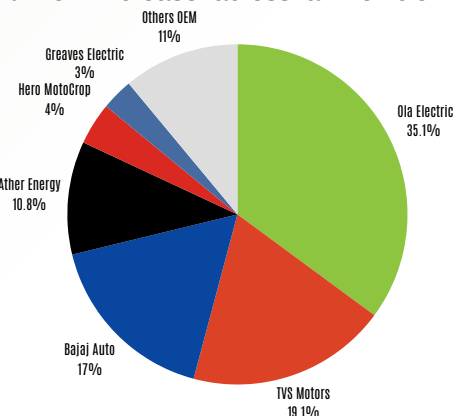
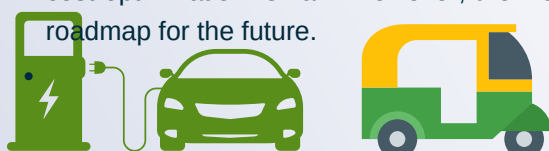
A Bright Future for E2Ws

- The Indian E2W market is poised for continued growth as OEMs ramp up production and introduce innovative models to cater to evolving consumer needs. Government incentives, coupled with rising awareness of eco-friendly mobility solutions, will likely sustain this momentum into 2025.

Challenges and Opportunities Ahead

- While the market has witnessed impressive growth, challenges like battery reliability, charging infrastructure, and cost optimization remain. However, the industry's commitment to localization and partnerships promises a robust

roadmap for the future.



India's Electric 3W Market: A Comprehensive Overview (CY 2024)



The electric three-wheeler (E3W) segment in India continues to demonstrate its leadership in the transition to e-mobility. In CY2024, the industry achieved a historic milestone by clocking its best-ever annual sales of **691,011 units**, showcasing an 18% year-on-year (YoY) growth over CY2023's **583,597 units**. This remarkable performance solidifies the E3W segment's dominance, contributing to **56%** of the 1.22 million three-wheelers sold in CY2024. The segment, which has witnessed consistent growth over the past three years, reflects India's rapid adoption of zero-emission vehicles.

Key Highlights of CY2024

- 1. Dominance of Electric Models:** For the first time, every second three-wheeler sold in India was a zero-emission model, highlighting the segment's strong transition from internal combustion engines (ICE) to electric.
- 2. Market Leaders:**
 - **Mahindra Last Mile Mobility** retained its leadership with a 10% market share, selling 68,000 units (up 25% YoY).
 - **Bajaj Auto** climbed to the third position, with an astonishing 816% YoY growth, selling 41,879 units and securing a 6% market share.
- 3. Growth Trajectory:** Despite a high base, the E3W segment maintained its growth momentum with steady contributions from established players and emerging challengers.

Performance of Key Players

1. Mahindra Last Mile Mobility (LMM) : CY2024: 68,000 units sold

- **YoY Growth:** 25% (CY2023: 54,594 units) || **Market Share:** 10%

Mahindra LMM continues to dominate the E3W market with a diverse product portfolio and strong distribution network. Its ability to consistently innovate and deliver customer-centric solutions remains unmatched.

2. YC Electric : CY2024: 43,977 units sold

- **YoY Growth:** 8% (CY2023: 40,785 units) || **Market Share:** 6.36%

YC Electric has maintained its position with steady growth, driven by its reliable offerings tailored to urban and semi-urban markets.

3. Bajaj Auto: CY2024: 41,879 units sold

- **YoY Growth:** 816% (CY2023: 4,574 units)|| **Market Share:** 6%

Bajaj Auto emerged as the biggest success story of CY2024, leveraging its experience in the three-wheeler market to rapidly scale its electric vehicle production and sales.

4. Saera Electric Auto : CY2024: 28,294 units sold

- **YoY Decline:** -4% (CY2023: 29,321 units) || **Market Share:** 4%

While Saera experienced a slight decline in sales, its continued focus on niche segments and fleet operators keeps it competitive.

5. Piaggio Vehicles: CY2024: 21,762 units sold

- **YoY Growth:** 3% (CY2023: 21,080 units) || **Market Share:** 3%

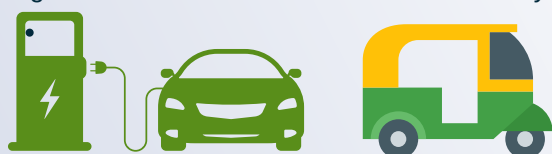
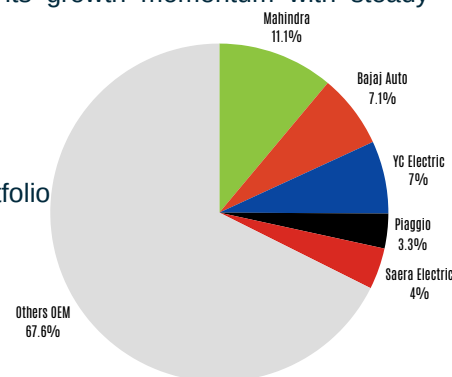
Piaggio's emphasis on performance and durability ensured modest growth and consistent presence in the market.

Looking Ahead

The E3W segment is expected to sustain its growth trajectory in CY2025, driven by:

- 1. Increased Localization:** Efforts by players like Mahindra and Bajaj to localize component manufacturing.
- 2. Technological Advancements:** Innovations in battery technology and electric drivetrains.
- 3. Expanding Market:** Growing demand from both urban consumers and commercial fleets.

While challenges like infrastructure development and battery recycling persist, the E3W industry is poised to remain a frontrunner in India's e-mobility journey. With strong contributions from market leaders and promising entrants, the segment is set to redefine sustainable mobility in the coming years.

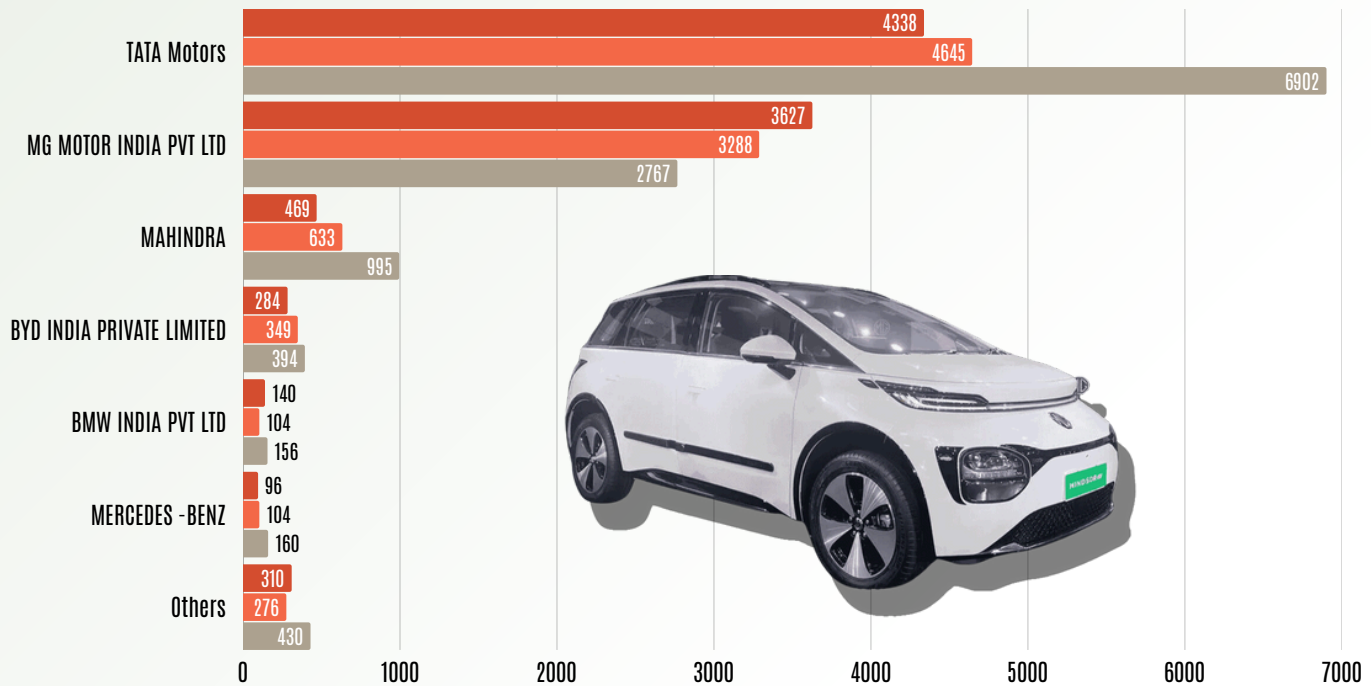


India EV Sales JAN 2025

EV 4W Passenger Sales Trend by OEM

SALES NOV 2024 INDIA - 9,264 UNITS

● DEC ● NOV ● OCT



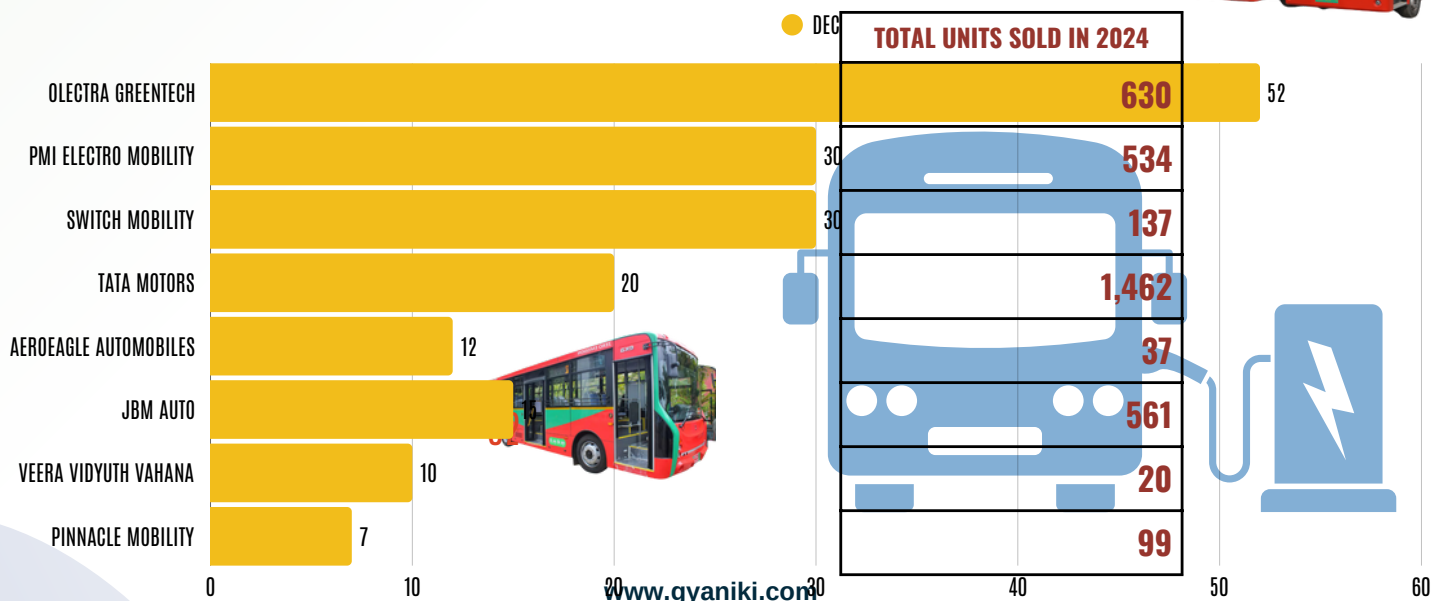
The Indian electric vehicle (EV) market has reached new heights in CY2024, achieving 99,000 units of electric car and SUV sales—a 20% growth from the previous year!

Tata Motors retains its lead with 61,435 units sold, but its market share dipped to 62% (down from 73%).

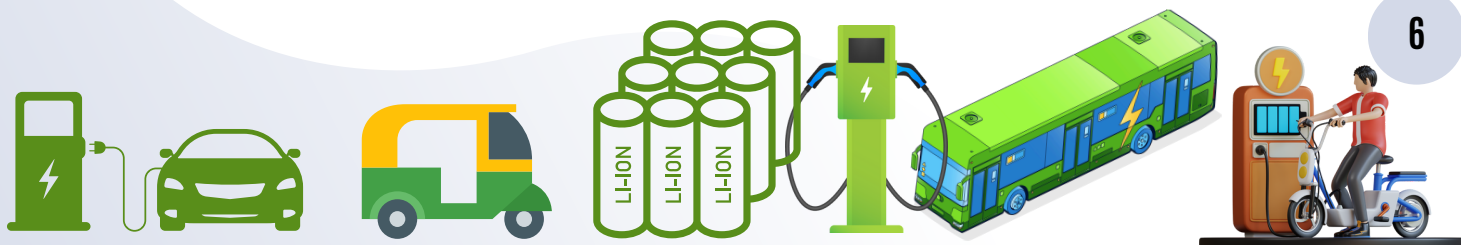
MG Motor India shines with a 125% YoY growth, selling 21,464 units and capturing 21% market share.

Data Source: Vahan Dashboard

E-BUS SALES NOV 2024 INDIA - 176 UNITS



In DEC 2024 India's electric BUS sales REDUCE 60+ % AS COMARE TO OCT, DEC 2024.



India's Electric 4W Market: A Comprehensive Overview (CY 2024)



The Indian electric passenger vehicle (e-PV) market has reached a historic milestone, recording its highest-ever annual sales in **CY2024 with 99,004 units sold**. This represents a robust **20% year-on-year growth** compared to **82,563 units in CY2023**. The increasing adoption of zero-emission vehicles, driven by affordability, environmental consciousness, and government incentives, is reshaping India's automotive landscape.

Market Highlights

A Competitive Landscape

- **Tata Motors:** Dominates the market with 61,435 units sold, marking a 2% YoY growth.
 - Despite retaining its leadership position, Tata's market share dropped from 73% in CY2023 to 62% in CY2024, as rivals gain traction.
- **JSW MG Motor India:** Achieved a phenomenal 125% YoY growth with 21,464 units sold.
 - Doubled its market share to 21%, solidifying its position as Tata's key competitor.
- **Mahindra & Mahindra:** Recorded a strong 66% YoY growth, selling 7,104 units and capturing 7% of the market.
- **BYD India:** Continued its steady growth with a 40% YoY increase, selling 2,819 units to secure a 2.84% market share.
- **PCA Motors / Citroën India:** Sales declined by 4%, with 1,873 units sold. Its market share dropped to 1.89% from 2.36% in CY2023.
- **Hyundai Motor India:** Experienced a significant setback with a 43% YoY decline, selling just 910 units.
- **Kia India:** Registered an 8% YoY decline, with sales at 401 units.

Luxury EV Segment Sees Growth

Luxury electric vehicle manufacturers collectively **sold 2,828 units in CY2024**, reflecting a modest **7% YoY growth**. While they account for a small percentage of the overall market, their growing presence signals increasing demand for premium green mobility solutions.

2024: A Pivotal Year for Indian EVs

- The transition to electric mobility is visible with the growing number of green-plated SUVs, sedans, and hatchbacks on Indian roads.
- Despite higher initial costs, more buyers are choosing EVs over petrol or diesel counterparts, highlighting the appeal of long-term savings and environmental benefits.
- Between 2015 and 2024, nearly 250,000 electric PVs have been sold, reflecting the market's exponential growth.

Looking Ahead to CY2025

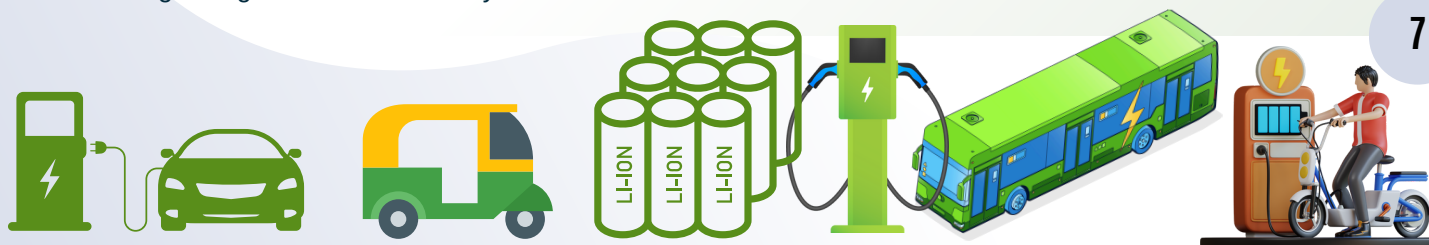
The coming year promises to be a game-changer, with several anticipated launches:

- Maruti Suzuki e-Vitara and Hyundai Creta EV are expected to drive significant interest and further expand the market.
- Tata Motors will need to defend its leadership position against an increasingly competitive field, particularly JSW MG Motor India and Mahindra's new offerings.
- Growth in charging infrastructure and innovations like Battery-as-a-Service (BaaS) will play a crucial role in boosting consumer confidence.

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Challenges and Opportunities

- While the e-PV segment is flourishing, charging infrastructure utilization remains low, and range anxiety continues to be a concern for many EV owners.
- Competitive pricing, local manufacturing, and strategic partnerships will be essential for automakers to gain an edge.
- The Indian automotive industry must also address challenges like localization and supply chain optimization to meet the growing demand sustainably.



India EV Sales DEC 2025

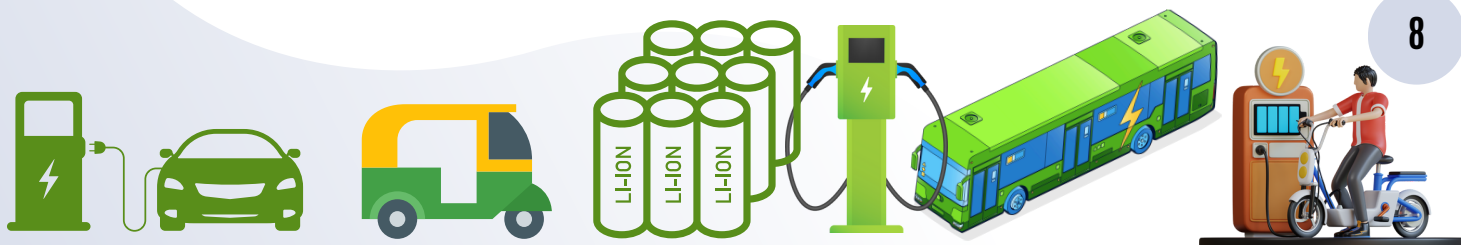
Top 10 Electric Vehicle Sales Trend by OEM



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gyaniki EV Sales Report				
TOP 10 DEC 2024 ELECTRIC VEHICLE SALES DATA				
DEC 2024 - 2W WHEELER ELECTRIC VEHICLE SALES DATA				
SR. NO	OEM	Nov-24	Dec-24	% increase in DEC 2024
1	OLA ELECTRIC	29257	13770	-53%
2	TVS MOTOR	27216	17231	-37%
3	BAJAJ AUTO	26358	18295	-31%
4	ATHER ENERGY	12909	10429	-19%
5	HERO MOTOCORP	7344	1020	-86%
6	GREAVES ELECTRIC	4470	2795	-37%
7	BGAUSS	1881	1100	-42%
8	KINETIC GREEN ENERGY & POWER SOLUT	1096	601	-45%
9	WARDWIZARD INNOVATIONS & MOBILIT	980	784	-20%
DEC 2024 - 3W ELECTRIC VEHICLE SALES DATA				
SR. NO	OEM	Nov-24	Dec-24	% increase in DEC 2024
1	MAHINDRA	7101	5502	-23%
2	BAJAJ AUTO	6131	4239	-31%
3	YC ELECTRIC	3978	3800	-4%
4	SAERA ELECTRIC	2263	2101	-7%
5	DILLI ELECTRIC	2044	2061	1%
6	PIAGGIO VEHICLES PVT LTD	2464	1358	-45%
7	SAHNIANAND E VEHICLES PVT LTD	1040	1204	16%
8	MINI METRO EV L.L.P	1229	1197	-3%
9	ENERGY ELECTRIC VEHICLES	1233	1152	-7%
10	ZENIAK INNOVATION INDIA LTD	672	1013	51%
DEC 2024 - 4W ELECTRIC VEHICLE SALES DATA				
SR. NO	OEM	Nov-24	Dec-24	% increase in DEC 2024
1	TATA Motors	4645	4338	-7%
2	MG MOTOR INDIA PVT LTD	3288	3627	10%
3	MAHINDRA	633	469	-26%
4	BYD INDIA PRIVATE LIMITED	349	284	-19%
5	BMW INDIA PVT LTD	104	140	35%
6	MERCEDES -BENZ	104	96	-8%
7	KIA INDIA PRIVATE LIMITED	72	77	7%
8	PCA AUTOMOBILES INDIA PVT LTD	82	77	-6%
9	SWITCH MOBILITY AUTOMOTIVE LTD	30	67	123%
10	HYUNDAI MOTOR INDIA LTD	21	19	-10%

Source: Vahan Dashboard



Stocks: Lithium-ion Battery Manufacturers

The Indian electric vehicle (EV) market is rapidly evolving, presenting significant investment opportunities. This report highlights the current status and future prospects of key players in the **lithium-ion battery manufacturing segment**, alongside broader market trends expected in 2025.

Current Market Overview

As of January 2025, the Indian stock market is projected to experience moderate growth, with the Nifty index anticipated to reach between **25,000 and 27,500** by December 2025. This represents a potential upside of **5-16%** from the previous year's closing level of **23,644.80**. However, market sentiment remains cautious due to factors such as foreign selling, slowing corporate earnings, and high valuations. Analysts suggest that while the first half of 2025 may witness consolidation, a revival in corporate earnings and favorable government policies could drive optimism in the latter half of the year.

Lithium-ion Battery Manufacturers

The transition to EVs is heavily reliant on advancements in battery technology. Here's a closer look at key companies involved in lithium-ion battery production in India:

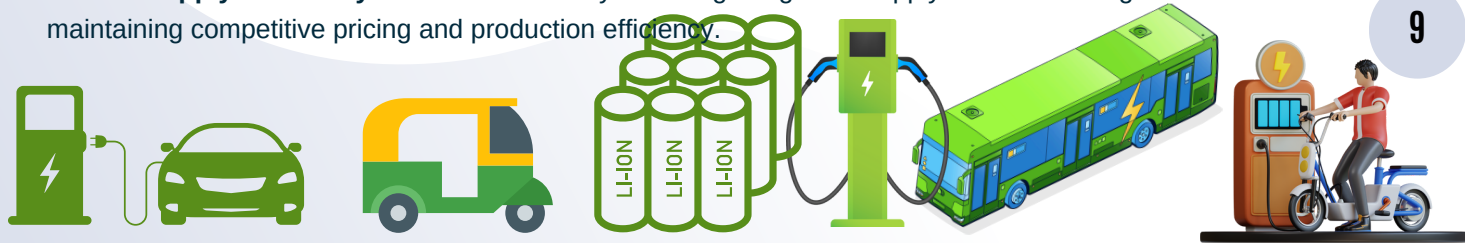
Key Players Battery Manufacturers

Company	Market Capitalization (INR Cr)	Future Outlook
BHEL and ISRO	Collaborating on battery development; commercialization timeline unclear.	Potential growth if collaboration yields successful technology.
Exide Industries	Established leader in lead-acid batteries; transitioning to lithium-ion technology.	Strong growth potential if transition is executed effectively.
Amara Raja Batteries	Investing in lithium-ion production; success depends on execution capabilities.	Future growth hinges on successful implementation of production plans.
HBL Power Systems	Focused on energy storage solutions; potential for EV battery expansion.	Growth prospects linked to increasing demand for energy storage in EVs.
JSW Energy	Diversifying into lithium-ion batteries; long-term strategy not fully revealed yet.	Future success will depend on strategic execution and market acceptance of new products.

Stock Market Status for 2025

Investors are keenly watching these companies as they play a pivotal role in India's EV ecosystem. The stock performance of these firms will be influenced by several factors:

- Government Policies:** A strong push from the government towards renewable energy and infrastructure development could enhance growth prospects for these companies.
- Market Demand:** As consumer demand for EVs rises, companies that successfully transition to lithium-ion battery production may see substantial stock price appreciation.
- Global Supply Chain Dynamics:** The ability to navigate global supply chain challenges will be crucial for maintaining competitive pricing and production efficiency.



CATL Launches Choco-SEB Swappable Battery Packs for Passenger Vehicles

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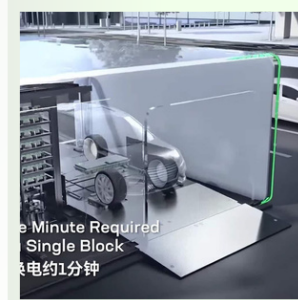
Contemporary Amperex Technology Co., Ltd. (CATL) has recently made headlines in the automotive industry with the unveiling of its innovative **Choco-SEB (Swapping Electric Blocks) battery packs**, designed specifically for passenger vehicles. This groundbreaking development aims to transform the electric vehicle (EV) market by enhancing the efficiency and accessibility of battery swapping technology.

Key Features of Choco-SEB Battery Packs

CATL introduced two standardized battery packs, named **20# and 25#**, which are tailored for different vehicle classes. The **20# Choco-SEB** is intended for A0 class vehicles, such as small city cars and subcompact hatchbacks, while the **25# Choco-SEB** caters to A and B class vehicles, including compact and mid-size cars like the **BYD Dolphin** and **BYD Seal**.

Specifications:

- **20# Choco-SEB:**
 - Capacity: 42 kWh (LFP) or 52 kWh (NMC)
 - Range: Up to 500 km
- **25# Choco-SEB:**
 - Capacity: 56 kWh (LFP) or 70 kWh (NMC)
 - Range: Up to 600 km

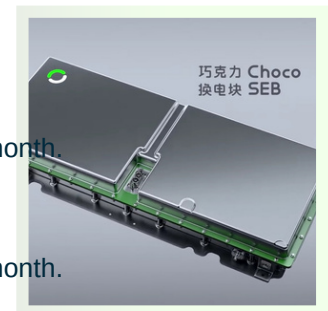


These packs not only offer substantial range but also come with flexible subscription plans tailored for different user needs.

Subscription Plans

CATL offers various subscription options for users of the Choco-SEB battery packs:

- **For A0 Class Vehicles (20#):**
 - **Travel Plan:** 52 kWh NMC at 469 yuan/month (~\$64) for unlimited mileage.
 - **Family Plan:** 42 kWh LFP at 369 yuan/month (~\$50) with a limit of 3,000 km per month.
- **For A/B Class Vehicles (25#):**
 - **Travel Plan:** 70 kWh NMC at 599 yuan/month (~\$82) for unlimited mileage.
 - **Family Plan:** 56 kWh LFP at 499 yuan/month (~\$69) with a limit of 3,000 km per month.



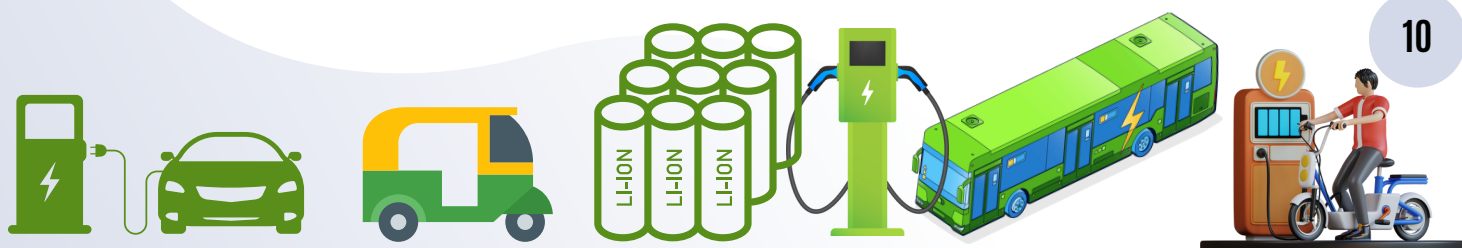
Vehicle Integration and Partnerships

- At the launch event, CATL announced that 10 vehicles from various manufacturers will be equipped with the Choco-SEB battery packs. This includes notable models such as: **Changan Oshan 520, GAC Aion S, Hongqi E-QM5, SAIC Roewe D7, BAIC C66, Wuling Bingo, Wuling Starlight, SAIC Rising F7, SAIC Maxus Mifa 9, SAIC Maxus Dana**

This collaboration underscores CATL's commitment to standardizing battery swapping technology across the industry.

EVOGO Swap Brand and Future Outlook

CATL's battery swap initiative, branded as EVOGO, was launched in early 2022. The company has ambitious plans to establish a robust infrastructure supporting this technology. By 2030, CATL predicts that approximately one-third of vehicles in China will utilize battery swapping, supported by a network of 30,000 swapping stations, with an initial rollout of 1,000 stations by next year. Each station is designed to facilitate quick swaps—taking only about 100 seconds to exchange a depleted battery for a fully charged one, with a daily capacity of up to 822 swaps.



Top Money Movement

JSW Group

Maharashtra has made a significant stride in strengthening India's electric vehicle (EV) ecosystem by offering land and incentives for JSW Group's ambitious **₹15,000 crore** battery manufacturing project in **Nagpur**. This initiative not only aims to bolster the state's manufacturing capabilities but also aligns with India's commitment to becoming a global hub for EV innovation and clean energy solutions.



Samvardhana Motherson

Samvardhana Motherson International Ltd (SAMIL) has announced its acquisition of Atsumitec Co., a Japanese automotive components manufacturer, for **\$57 million (approximately ₹475 crore)**. This strategic acquisition is part of SAMIL's ongoing efforts to bolster its presence in key international markets and diversify its product offerings.

Stellantis - CATL

Stellantis N.V. and Contemporary Amperex Technology Co., Limited (CATL) unveiled plans for a transformative investment of up to **€4.1 billion** in a 50:50 joint venture aimed at establishing a large-scale lithium iron phosphate (LFP) battery plant in Zaragoza, Spain. This strategic collaboration is poised to significantly bolster both companies' positions within the rapidly evolving electric vehicle (EV) market across Europe.



Go EV

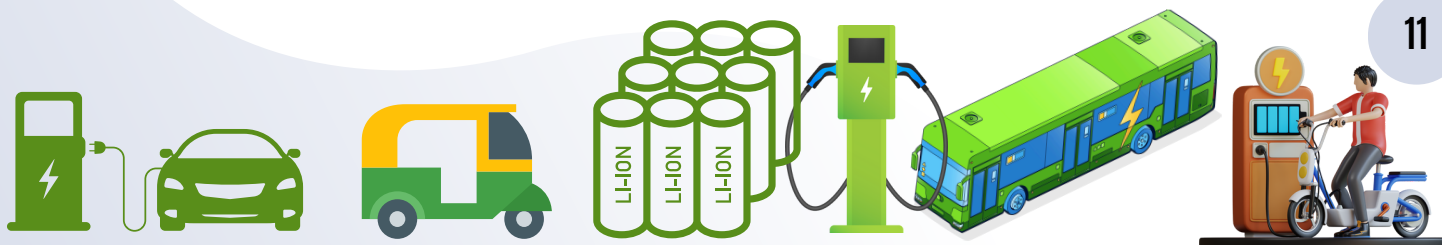
Go EV Mobility has successfully secured **INR 25 crores** in a pre-money valuation funding round led by Novogram Investments. This funding is poised to accelerate the company's mission of revolutionizing the electric mobility landscape in India. The announcement was made recently, highlighting the company's commitment to developing innovative solutions in the rapidly evolving automotive sector.

Zingbus

Zingbus, an innovative intercity mobility startup based in Gurugram, has successfully secured **₹59 crore (approximately \$7 million)** in a Series A funding round led by BP Ventures. This investment marks a pivotal moment for the company as it seeks to expand its operations and enhance its technological infrastructure to support the electrification of India's intercity bus routes.



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Top Money Movement

Ola Electric

Ola Electric has announced a massive **₹2,200 crore capital** expenditure for FY25, aimed at expanding its lithium-ion cell manufacturing capabilities. This move underscores India's growing ambitions to become a global hub for EV battery production and reduce dependence on imports.



EKA Mobility

EKA Mobility has bagged two major orders worth **₹150 crore** from **Uttar Pradesh State Road Transport Corporation (UPSRTC)** to deliver 70 state-of-the-art electric buses

Greenie Energy

EV Charging Company Greenie Energy Secures \$600,000 in Seed Funding. Mumbai-based Greenie Energy, a start-up specializing in electric vehicles (EV) charging technology, has raised **\$600,000** in a seed funding round from a group of investors led by Rajesh Advani, Managing Director of Sun-N-Sand Hotels.



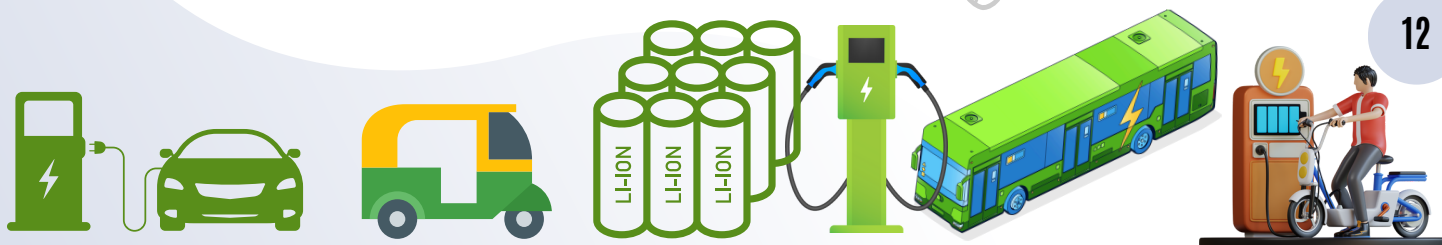
FAME II Subsidy Misuse

Hero Electric, Benling India, and Okinawa Autotech face SFIO raids over **₹297 crore** in misused subsidies under the **FAME II scheme**. Evidence reveals violations of localization requirements, including unauthorized imports from China.

Govt. Of India

Modi government is planning a **₹9,000-crore** initiative to boost **EV battery production** and reduce import dependency, aiming to make India a global leader in the sector.

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Top Money Movement

VOICE

VOICE, an innovative electric vehicle (EV) startup, has successfully raised **₹5 crore** in seed funding. The funding round was led by BizDateUp, a prominent ecosystem enabler for startups. This investment marks a pivotal moment for VOICE as it aims to scale its operations and enhance its product portfolio, ultimately revolutionizing last-mile delivery logistics across the nation.



Dawki Mobility

Dawki Mobility, a subsidiary of Three D Magic Info Solutions Pvt. Ltd., is making significant strides in the electric vehicle (EV) sector with plans to invest **₹100 crores** over the next two years to establish a cutting-edge manufacturing facility in Khed City, Pune, Maharashtra. This initiative is part of a broader strategy to meet the growing demand for electric vehicles in India, which has seen a surge in interest and investment in recent years.

TATA MOTORS

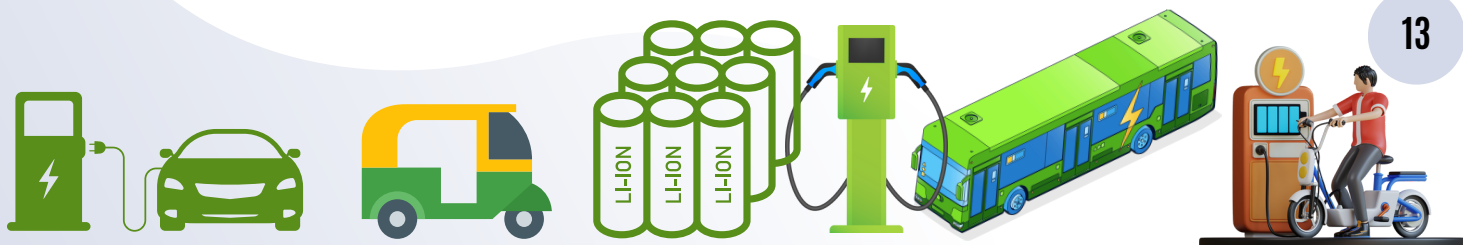
Tata Motors has secured an additional order for **148 electric buses** from the Bengaluru Metropolitan Transport Corporation (BMTTC). This order will see the deployment of Tata Starbus EV 12-metre low-floor electric buses, which will be supplied, operated, and maintained by TML Smart City Mobility Solutions Ltd., a wholly owned subsidiary of Tata Motors, over a period of 12 years. This latest order follows a previous contract for **921 electric buses**, most of which have already been delivered and are currently operational in the city.



FUTURE MOBILITY PARTNERS



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Top Money Movement

Volkswagen Group

Volkswagen Group has made a significant move in the electric vehicle (EV) sector by acquiring a **9.9% stake** in Canadian lithium developer Patriot Battery Metals for approximately **C\$69 million (around \$48.1 million)**. This strategic investment marks Volkswagen's first foray into the mining industry, emphasizing its commitment to securing essential raw materials for its EV production.



Nouveau Monde Graphite Inc. (NMG)

(NMG) has secured a significant equity investment of US\$50 million from the Canada Growth Fund Inc. (CGF) and the Government of Québec, marking a pivotal moment for the company as it advances its Phase 2 operations in the ore-to-battery-material graphite sector. This investment is aimed at propelling NMG towards its goal of establishing one of North America's largest fully integrated natural graphite production facilities, crucial for the burgeoning electric vehicle (EV) market.

VOICE

Electric vehicle (EV) startup VOICE, previously known as EV91Technologies Pvt Ltd, has successfully raised **₹5 crore** in a seed funding round led by BizDateUp, a prominent ecosystem enabler for startups. This significant investment is set to bolster VOICE's mission of transforming last-mile delivery logistics through sustainable mobility solutions. The funds will primarily be utilized to deploy an additional 2,500 electric vehicles and expand operations into underserved Tier 2 cities across India.



Raghavendra Mysore
Co-Founder



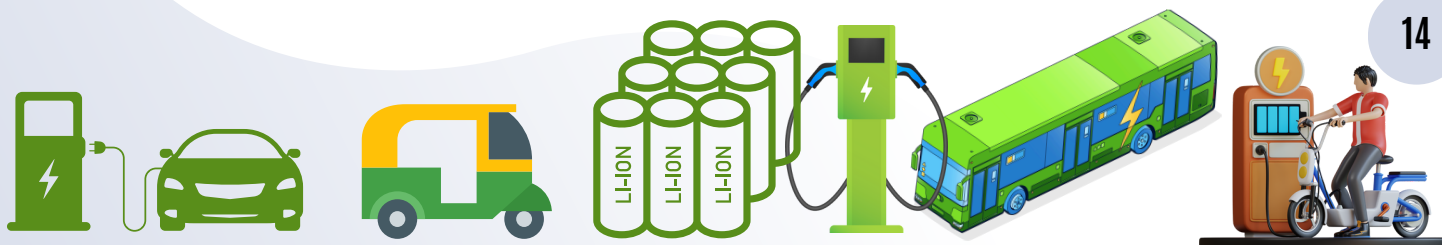
Ramesh Kumar VG
Co-Founder



Ennarasu Karunesan
Co-Founder

MOOEV Technologies

MOOEV Technologies has successfully raised **Rs 4 crore in seed funding**. This investment round was led by BizDateUp, with additional contributions from **Inflection Point Ventures** and **Spectrum Impact**, the family office of Aarti Industries. The funding will primarily support the deployment of an initial fleet of 15 electric heavy-duty trucks, marking a pivotal step towards sustainable logistics solutions in the country.

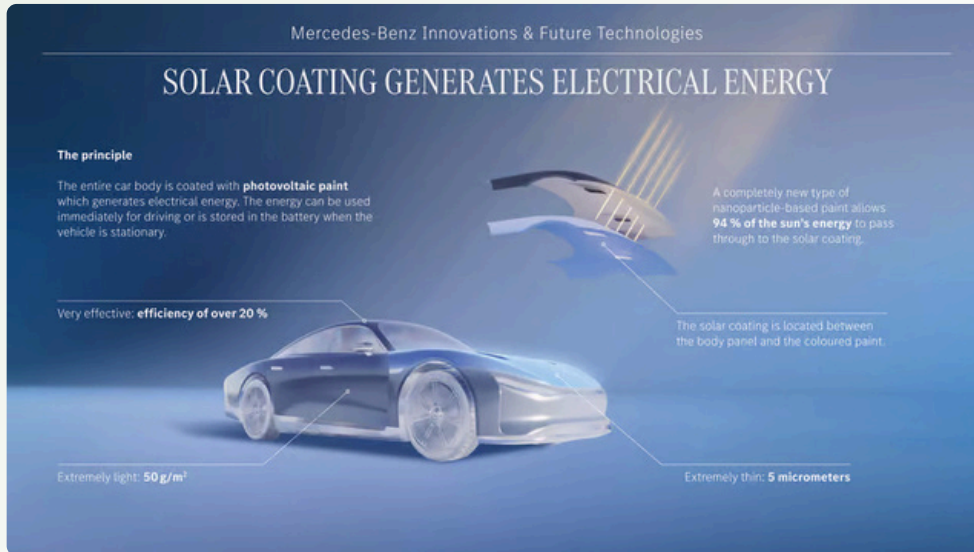


Mercedes-Benz Unveils Revolutionary Solar Paint

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TECHNOLOGY



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Innovative technology promises to generate up to 12,000 kilometers of range annually, pushing the boundaries of sustainable mobility.

Mercedes-Benz has unveiled its revolutionary solar paint, capable of generating up to 12,000 kilometers of driving range annually for electric vehicles (EVs). This innovative development integrates ultra-thin solar modules into the vehicle's bodywork, creating a self-sustaining energy source that could redefine the future of electric mobility.

Technology Behind Solar Paint

The solar paint technology is remarkable not only for its efficiency but also for its design. At just five micrometers thick, the solar layer is lighter than human hair and weighs only 50 grams per square meter. With an impressive efficiency rate of **20%**, this paint aims to transform how energy is harnessed in vehicles. When applied to an area equivalent to the surface of a mid-size SUV, it has the potential to generate enough electricity to power up to **12,000 kilometers** of driving annually under optimal conditions.

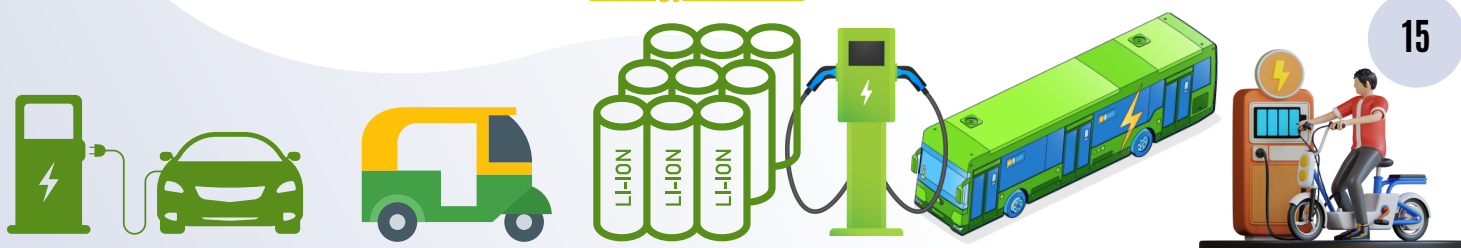
This innovative coating remains active even when the vehicle is turned off, allowing it to generate energy continuously. The surplus energy produced can be utilized for driving or stored in the vehicle's high-voltage battery. This capability significantly reduces reliance on traditional charging infrastructure, addressing one of the major concerns among EV users—range anxiety.

Efficiency and Environmental Impact

The implications of solar paint extend beyond convenience; they also contribute to environmental sustainability. In cities like Stuttgart, where drivers typically cover around 52 kilometers daily, approximately 62% of this distance could potentially be powered by solar energy alone. In sunnier locales such as Los Angeles, this figure could reach nearly 100%, showcasing the technology's adaptability based on geographical conditions.

Moreover, Mercedes-Benz emphasizes that the materials used in this solar paint are non-toxic and readily available. This makes it not only easier to recycle but also more cost-effective compared to conventional solar modules. By eliminating the need for rare earth metals and silicon, this innovation aligns with broader sustainability goals in the automotive industry.

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Contemporary Amperex Technology Co., Ltd. (CATL)

CATL has unveiled its new Choco-SEB (Swapping Electric Blocks) battery packs, designed to enhance the convenience of battery swapping for passenger vehicles. This innovative solution was introduced at a recent event in Xiamen, Fujian Province, where CATL outlined its ambitious plans to revolutionize the EV landscape in China and beyond.

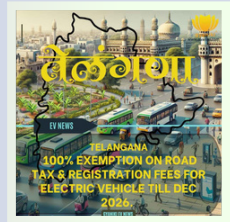


ZeroAvia

ZeroAvia, a leader in zero-emission flight technology, has successfully completed the first test flight of its 19-seat Dornier 228 aircraft powered by a hydrogen-electric engine. This historic flight took place at Cotswold Airport in Gloucestershire, UK, and represents a significant milestone in the development of environmentally friendly commercial aviation.

Telangana - 100% Road Tax Exemption for Electric

The Telangana government has announced a significant initiative aimed at promoting electric vehicle (EV) adoption in the state by offering a **100% exemption from road tax and registration fees** for a wide range of electric vehicles purchased and registered until **December 31, 2026**.

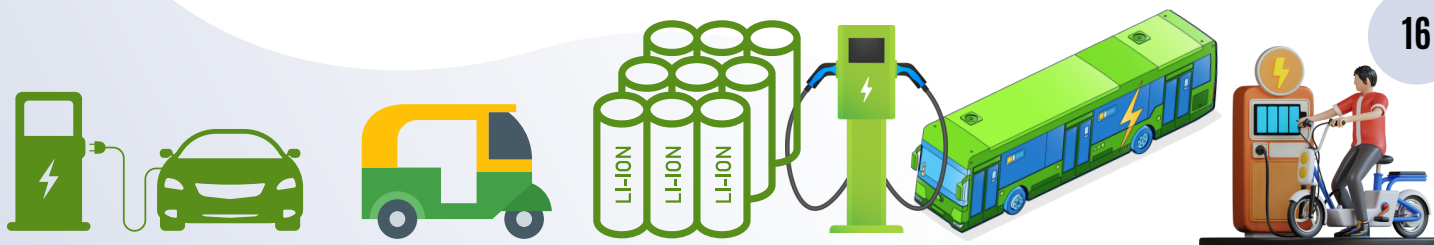


Greaves Retail

Greaves Retail, a division of Greaves Cotton Limited, has unveiled its new range of electric light construction equipment at the bauma **CONEXPO India 2024**. This launch emphasizes the company's commitment to providing zero-emission solutions that enhance performance while reducing operational costs in India's rapidly growing construction sector.



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Lucid Motors

Lucid began serial production of its new Gravity midsize electric SUV at the plant in Casa Grande, Arizona. The first version being built is the **828 hp** Gravity Grand Touring, which has a range estimated to exceed **440 miles** and is priced from USD 94,900 before destination fees.



Skoda Auto

Skoda Auto celebrates the production of its one-millionth EV battery at its facility in Mladá Boleslav, Czech Republic. These batteries are used in plug-in hybrid and fully electric vehicles across the Volkswagen Group, reinforcing Skoda's role as a pivotal hub for EV innovation and manufacturing within the group

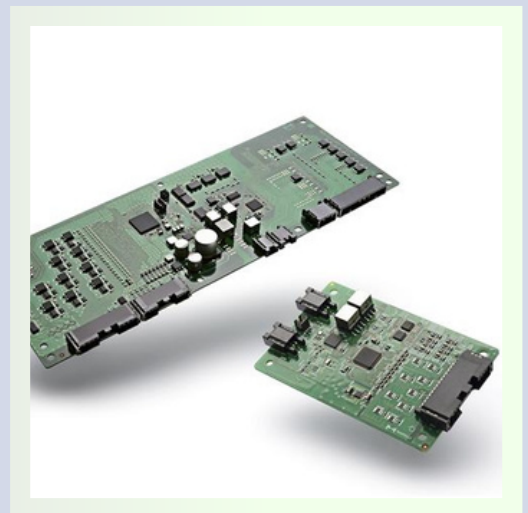
PMI Electro Mobility

PMI Electro Mobility to deliver 250 air-conditioned electric buses to Mumbai's BEST by FY26, driving urban e-mobility.

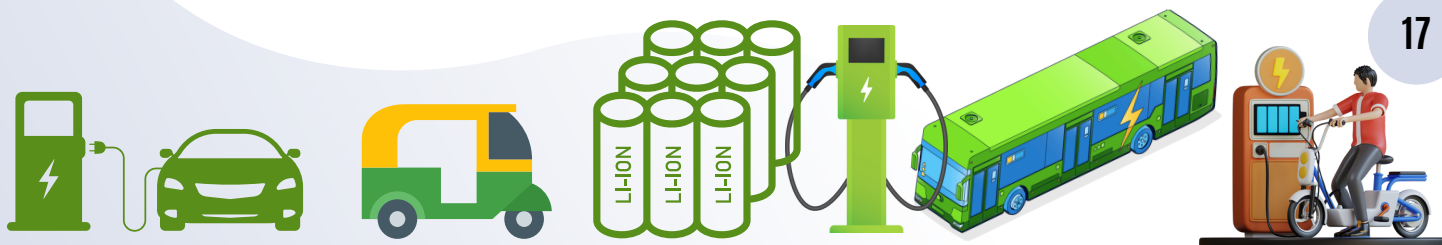


Greaves Retail

Marelli has announced a new pioneering advancement in Battery Management Systems (BMS) for automotive applications, with a BMS based on the Electrochemical Impedance Spectroscopy. This development is set to elevate the standard for battery cell management by ensuring optimal operation and enhanced performance of the battery pack.



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Tivolt Electric Vehicles

Tivolt Electric Vehicles, a subsidiary of TI Clean Mobility (TICMPL) and part of the Murugappa Group, has successfully obtained the CMVR Type Approval Certificate for their upcoming electric Small Commercial Vehicle (SCV), the TIVOLT E-350L FSD V1. The certificate was officially presented by Dr. Reji Mathai, Director of the Automotive Research Association of India (ARAI), to Nishit Chandra Goel, Senior Associate VP & Head of R&D-SCV/LCV at Tivolt. This achievement is pivotal as it not only validates the vehicle's compliance with India's stringent automotive regulations but also underscores Tivolt's commitment to innovation in the EV space. The TIVOLT E-350L FSD V1 is designed to cater to the growing demand for environmentally friendly transportation solutions within the small commercial vehicle segment.





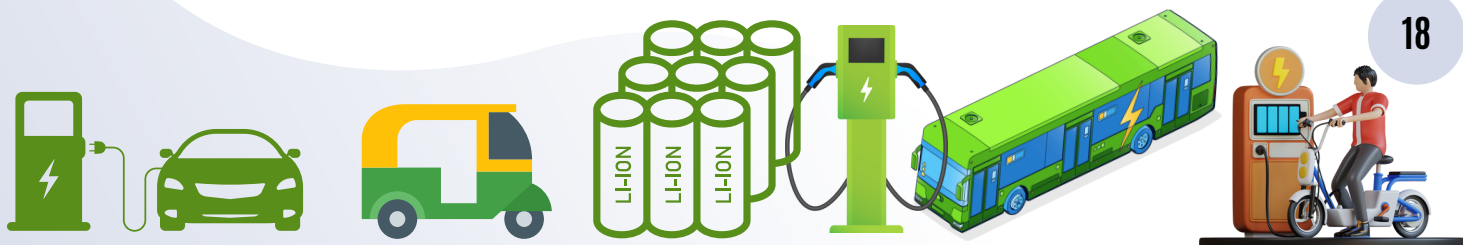
Hyundai Motor India

Hyundai Motor India Ltd. (HMIL) has unveiled an ambitious initiative aimed at bolstering the electric vehicle (EV) infrastructure in the country. The company plans to install 600 fast public EV chargers over the next seven years, focusing on strategic locations along major highways and in urban centers. This move is part of HMIL's broader strategy to support the growing demand for electric vehicles in India and to facilitate a smoother transition towards sustainable transportation.

Expansion of Charging Network

By the end of 2024, HMIL's network will feature over 50 DC fast charging stations strategically located across highways, major cities, and dealerships. These stations will be equipped with multiple charging configurations, including combinations of DC 150 kW, DC 60 kW, and DC 30 kW chargers.

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EKA Mobility

EKA Mobility, a division of Pinnacle Mobility Solutions Pvt. Ltd., has announced a significant milestone in its mission to revolutionize public transportation in India. The company has secured an **order from the Nagpur Municipal Corporation (NMC)** for the supply of **250 electric buses**

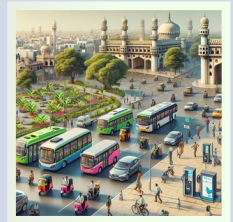


LICO Materials

LICO Materials has inaugurated the country's largest **battery recycling facility** in Bengaluru. This state-of-the-art plant is designed to process 17,500 metric tonnes of lithium-ion batteries annually and is pivotal in supporting India's ambitious goal of achieving 30% EV adoption by 2030. With an initial capacity of 4 GWh, LICO plans to scale this up to 10 GWh within the next three to four years.

Andhra Pradesh Launches Sustainable Electric Mobility Policy (4.0)

Andhra Pradesh Sustainable Electric Mobility Policy (4.0) 2024-29, aiming to transform the state into a global hub for electric vehicle (EV) manufacturing and adoption. This policy, released on December 11, 2024, outlines a comprehensive framework to accelerate the transition to electric mobility, with specific targets and financial incentives designed to foster growth in the sector.

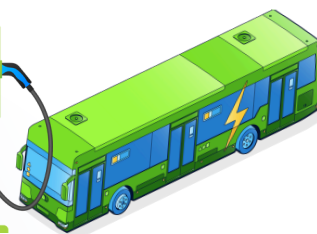
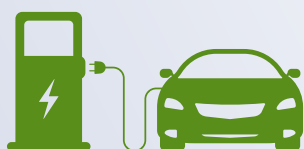


Slovakia

Slovakia is often associated with its stunning Gothic castles and rich cultural history. However, a new chapter is being written in its automotive narrative with the introduction of the M&I RH120R, the country's first hydrogen-powered heavy-duty truck. Unveiled on November 15 at the Slovakia Ring motor racing facility, this vehicle marks a significant milestone for both Slovakia and the European automotive landscape.

M&I RH120R

Manufactured by Mobility & Innovation Production (MIP), a Slovak startup specializing in emission-free propulsion systems, the M&I RH120R is built on the robust Ford Trucks F-MAX platform. This innovative truck has successfully passed stringent EU homologation tests, making it the first certified hydrogen truck in Slovakia. With a gross weight of 45 tonnes and an impressive range of up to 750 kilometers per hydrogen fill-up, this vehicle is poised to revolutionize heavy-duty transportation in Europe



SREC x Devise Electronics: An Electrifying Collaboration For a Better Tomorrow!



Sri Ramakrishna Engineering College (SREC) in Coimbatore signed a significant Memorandum of Understanding (MoU) with Devise Electronics Pvt. Ltd., based in Pune. This partnership aims to revolutionize the landscape of electric vehicles (EVs), embedded systems, and the Internet of Things (IoT). The collaboration is poised to enhance innovation, research, and skill development, addressing the growing demand for expertise in these critical sectors.

A Vision for the Future

The MoU signifies a commitment to fostering knowledge sharing and joint research initiatives between **SREC and Devise Electronics**. As the automotive industry pivots towards electrification, this collaboration is timely, aligning with global trends that prioritize sustainable transportation solutions. Both institutions recognize the urgent need to equip students and faculty with cutting-edge skills and knowledge to navigate this evolving landscape.



Key Components of the Collaboration

- 1. Joint Research and Development:** The partnership will focus on collaborative R&D projects aimed at developing new technologies in electric mobility.
- 2. Skill Enhancement Programs:** SREC and Devise Electronics will implement training programs designed to prepare students for careers in the rapidly expanding EV sector.
- 3. Knowledge Sharing Initiatives:** Faculty members from both institutions will engage in workshops and seminars to foster an exchange of ideas and best practices.

This strategic alliance is expected to create a robust pipeline of talent skilled in electric vehicle technology, thereby addressing the skills gap in the industry. As highlighted by industry experts, the demand for professionals proficient in EV systems is surging as more companies invest in electric mobility solutions.

The Growing Demand for Skilled Professionals

The electric vehicle sector is experiencing unprecedented growth, leading to an increase in job opportunities across various domains. According to recent studies, engineering students specializing in areas such as battery systems, powertrain engineering, and charging infrastructure are particularly well-positioned for success. The collaboration between SREC and Devise Electronics will provide students with hands-on experience through internships and practical training programs.

Promising Career Paths in Electric Vehicles

- **Battery Systems Engineer:** Focuses on developing efficient battery management systems.
- **Electric Powertrain Engineer:** Works on optimizing propulsion systems for enhanced performance.
- **Charging Infrastructure Specialist:** Designs EV charging networks to support growing demand.
- **Autonomous Vehicle Engineer:** Develops advanced technologies for self-driving vehicles.
- **Sustainability Analyst:** Evaluates environmental impacts of EVs throughout their lifecycle.

These roles are crucial as the industry shifts towards more sustainable practices, emphasizing the importance of education and training in these fields.

The Role of Devise Electronics

Devise Electronics has been at the forefront of engineering solutions for electric vehicles since its inception in 2013. With expertise spanning various domains such as embedded electronics, IoT connectivity, and vehicle integration, Devise is well-equipped to contribute significantly to this collaboration. Their commitment to innovation aligns perfectly with SREC's educational mission.

Training Programs Offered

Devise Electronics offers over 160 training programs tailored for engineers at various levels. These programs focus on practical skills that prepare participants for immediate employment in the EV sector. By partnering with SREC, Devise aims to enhance its training offerings further, ensuring that students receive relevant and up-to-date education.

Joint Ventures & Partnerships

Wardwizard - Ampvolts

Wardwizard Innovations & Mobility Ltd. has officially partnered with Ampvolts, a leading provider of EV charging stations and infrastructure. This collaboration formalized through a Memorandum of Understanding (MoU) signed on November 25, 2024, aims to develop a robust EV charging infrastructure not only in India but also on an international scale.



Odysse Electric - Zypp Electric

Odysse Electric has announced a substantial **order of 40,000 electric two-wheelers** from Zypp Electric, an innovative player in the EV-as-a-service market. This strategic partnership is poised to enhance the production capacity and dealership network of Odysse Electric while supporting Zypp's ambitious plans to decarbonize last-mile logistics across the country.

PG Electroplast - Spiro Mobility Partnership

PG Electroplast Ltd (PGEL) has announced a strategic partnership with Spiro Mobility, Africa's largest EV manufacturer. This collaboration formalized through PGEL's wholly owned subsidiary PG Technoplast Ltd, positions the company as an exclusive manufacturing partner for Spiro in India. The announcement was made on November 18, 2024, and represents a pivotal step for PGEL as it aims to capitalize on the burgeoning demand for electric vehicles and related technologies.



IIT Kanpur - Zynetic

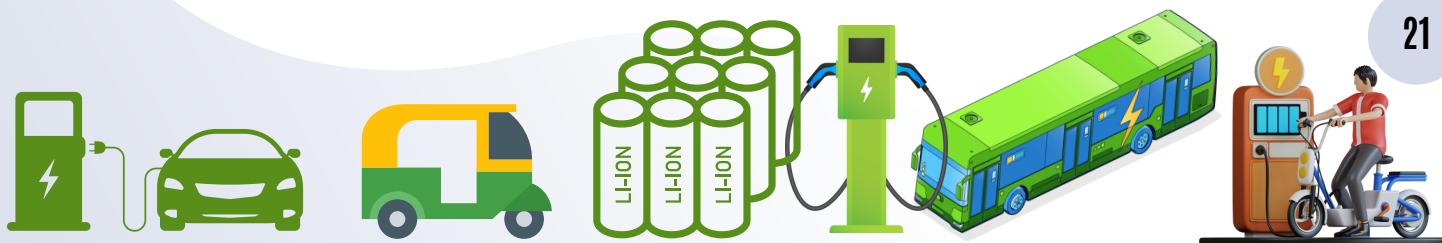
The Indian Institute of Technology Kanpur (IITK) has recently signed a Memorandum of Understanding (MoU) with Zynetic Electric Vehicles Charging Pvt. Ltd., a significant step aimed at enhancing electric vehicle (EV) charging technology in India. This collaboration is poised to address key challenges in the EV sector, particularly in developing advanced AC and DC fast chargers essential for the burgeoning electric vehicle market.

BIAL - Sarla Aviation

Bangalore International Airport Limited (BIAL) has partnered with Sarla Aviation to introduce **electric flying taxis in Bangalore**. This innovative initiative aims to alleviate the city's notorious traffic congestion while promoting sustainable and efficient travel options. The electric flying taxis will operate from a dedicated vertiport at **Kempegowda International Airport (KIA)**, providing seamless connectivity to key locations across the city.



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Joint Ventures & Partnerships

Costech Infrastructure Solutions - ESYGO

Kerala is on the brink of a significant transformation in its electric vehicle (EV) infrastructure, with plans to establish **2,000 charging stations by 2030** through a partnership between **Costech Infrastructure Solutions and ESYGO**. This ambitious initiative aims to enhance the convenience of electric mobility across the state, making it a leader in sustainable transport solutions.



Sterling Tools - GLVAC

Sterling Tools Limited, through its subsidiary SterlingTech-Mobility Limited, has announced a strategic partnership with Kunshan GLVAC Yuantong New Energy Technology Co., Ltd. (GLVAC YT). This collaboration focuses on the local manufacturing of High Voltage Direct Current (HVDC) contactors and relays essential for electric and hybrid vehicles. The initiative is expected to enhance the domestic supply chain, reduce import dependency, and align with India's Make in India initiative.

Motul India - Zypp Electric

Automotive lubricant maker Motul India has partnered with D2C EV brand Zypp Electric to launch a nationwide **training program for mechanics focusing on electric two-wheeler (e-2W) repair and maintenance**. The initiative, which began with a two-day pilot training session in **Gurugram**, aims to certify over 10,000 mechanics across India as EV repair specialists.

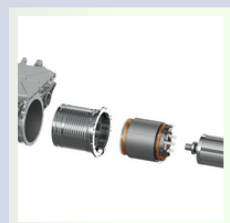


ChargeMOD - HPCL

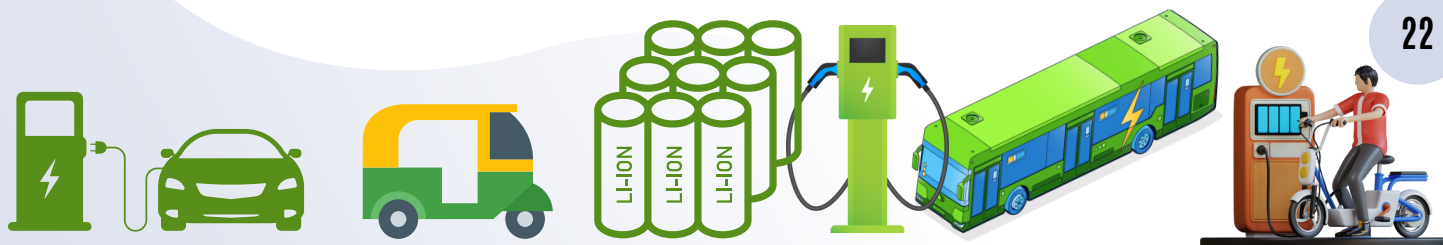
ChargeMOD joins hands with Hindustan Petroleum Corporation Limited HPCL to expand India's EV charging network. Using OCPI technology, EV drivers can seamlessly access **HPCL stations**. Over **100 fast chargers** will soon be deployed nationwide, cutting down charging times significantly.

Valeo - MAHLE

Valeo and MAHLE introduce their innovative iBEE technology, a magnet-free electric axle system. This breakthrough reduces carbon emissions by over 40% while delivering high performance of up to 350 kW for electric vehicles.



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Joint Ventures & Partnerships

Allegro MicroSystems

Allegro MicroSystems, a leading provider of magnetic sensing and power IC solutions, has inaugurated a new **research and development (R&D) center in Hyderabad, India**. This facility is poised to play a crucial role in advancing technologies related to electric vehicles (EVs), automotive systems, and robotics. The move is part of Allegro's broader strategy to enhance its global innovation capabilities while tapping into India's burgeoning semiconductor ecosystem.



SoundHound AI - KIA INDIA

SoundHound AI, a global leader in voice **artificial intelligence**, has announced the integration of its cutting-edge **voice technology** into Kia vehicles. This initiative aims to enhance the driving experience for Indian consumers by introducing a Hindi voice assistant as part of the Kia Connect platform. The feature is currently available in the newly launched **2025 Kia Carnival** and **2025 Kia EV9** models.



Wardwizard - Beulah International

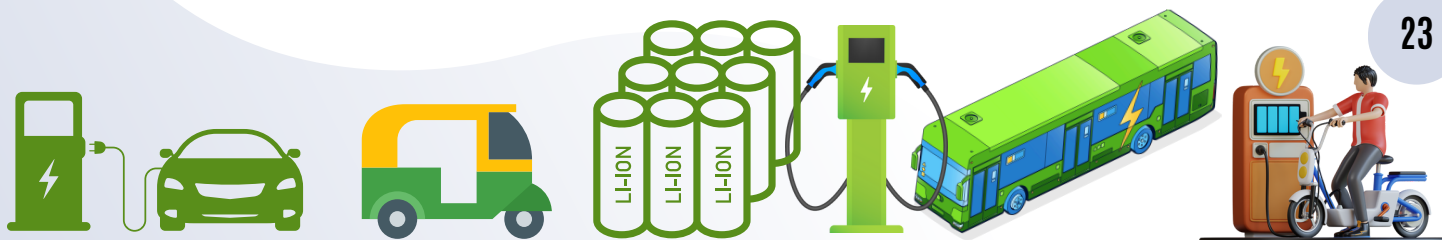
Wardwizard Innovations & Mobility Limited has dispatched its customised electric three-wheeler, the **e-Trike, to the Philippines**. This initiative is part of a broader **\$1.29 billion partnership** with Beulah International, aimed at modernising public transport in the Southeast Asian nation. The e-Trike is designed specifically for urban commuting and is expected to play a pivotal role in the country's efforts to transition towards greener transportation solutions.



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Joint Ventures & Partnerships

Vajram Electric Ltd

Vajram Electric Ltd., a prominent player in India's electric vehicle (EV) manufacturing sector, is embarking on an ambitious fundraising initiative aimed at enhancing its production capacity and modernizing its manufacturing facilities. This strategic move comes at a time when the global demand for electric vehicles is witnessing unprecedented growth



Denso - T-Hub

Japanese automotive technology leader Denso has announced a partnership with T-Hub, a prominent startup incubator based in Hyderabad, Telangana. This collaboration is set to leverage Denso's extensive expertise in automotive technology while fostering innovation among Indian startups focused on **artificial intelligence (AI), electrification, and advanced driver-assistance systems (ADAS)**.



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Ceer Partners - Rimac Technology

Ceer, Saudi Arabia's first electric vehicle (EV) brand, has announced a strategic partnership with Rimac Technology, a leader in high-performance electric drive systems. This collaboration aims to equip **Ceer's flagship models with cutting-edge technology** that promises to elevate the performance and efficiency of electric vehicles in the region.

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17 – 22 January 2025 |BHARAT MANDAPAM, NEW DELHI

Bharat Mobility Global Expo 2025 is the leading global mobility show in India and is a confluence of the world's leading automotive and mobility players. Now, in its second year, this global expo unites the entire mobility value chain under one umbrella. More than just an event, it sets the stage for the future of Mobility. The theme for Bharat Mobility Global Expo 2025 is "Beyond Boundaries: Co-creating Future Automotive Value Chain." This vision aims to foster collaboration and innovation across the automotive and mobility sector, emphasizing sustainable and cutting-edge technological advancements.

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Beyond Boundaries: Co-creating
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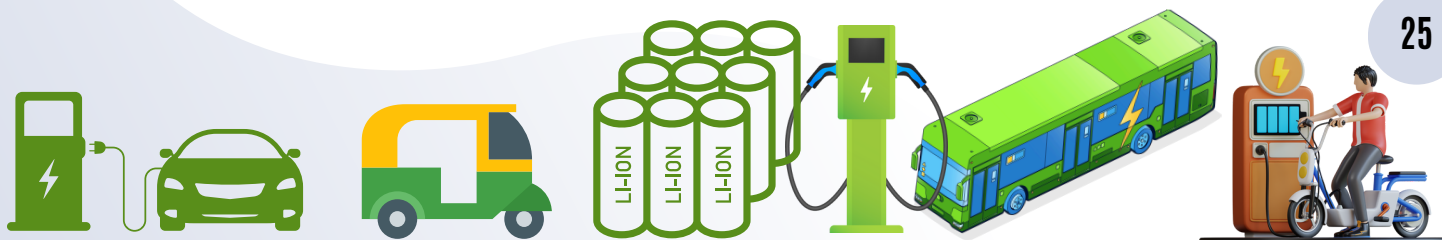
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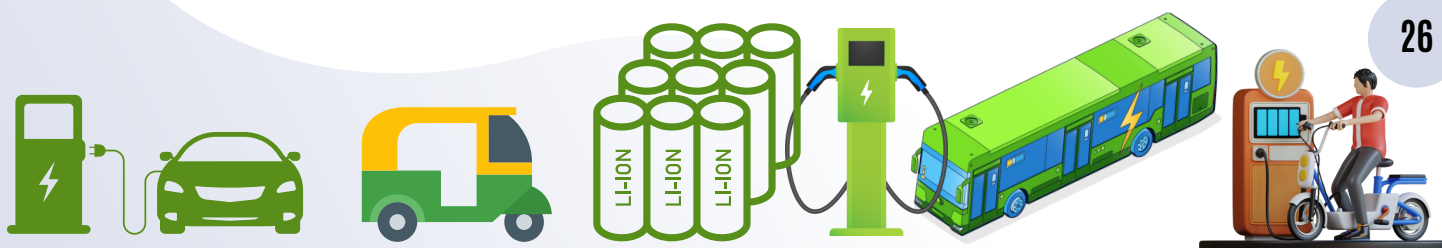
Episode 61
AI for EVs and Future Mobility

Dr. Ketan Kotecha Director, Symbiosis Institute of Technology
PhD(IIT Bombay)

25th January 2025 | 10:00 AM IST | Online Event

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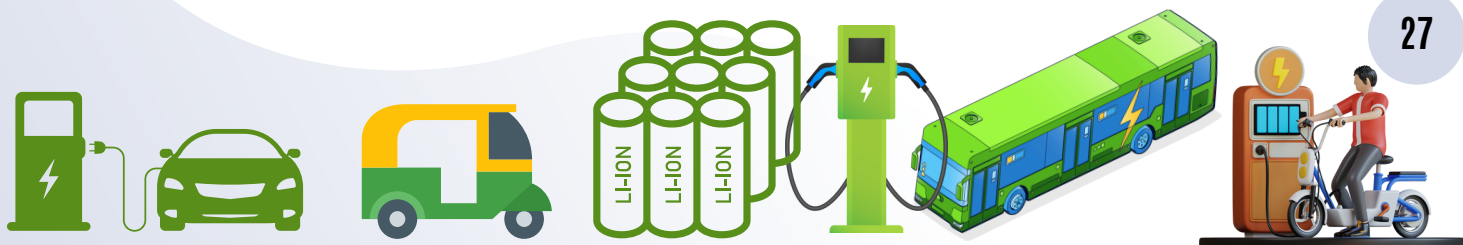
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Lectrix EV NDuro

The NDuro is priced at an attractive **INR 89,999** (ex-showroom) for the base version, with additional options available through a cost-effective Battery-as-a-Service (BaaS) model. Battery variants: the **2.3 kWh battery**, which provides an IDC range of **90 km**, is priced at **INR 89,999**, while the more powerful **3 kWh** variant, offering a range of **117 km**, will retail at **INR 99,999**.



Honda opens bookings for Activa e: and QC1 EVs at Rs 1,000

Honda Motorcycle & Scooter India, the latest of the legacy ICE two-wheeler manufacturers and the first Japanese OEM to enter the EV market, will officially announce the pricing for the Activa e: and QC1 at the Bharat Mobility Global Expo later this month.



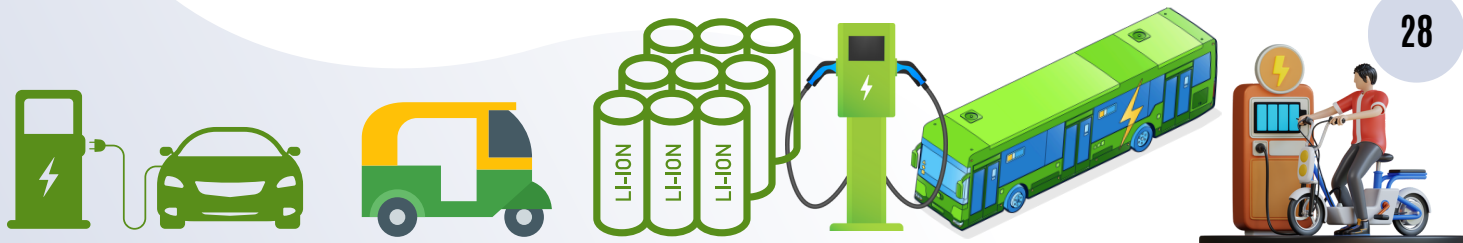
Activa e

Range: Up to 102 km on a single charge
Top Speed: 80 km/h
Acceleration: From 0 to 60 km/h in just 7.3 seconds
Rated Output: 4.2 kW
Maximum Output: 6.0 kW
Battery Technology: Equipped with two swappable batteries (1.5 kWh each)
Riding Modes: Standard, Sport, Eco, and Reverse
Display: A state-of-the-art 7-inch TFT display with Bluetooth connectivity and navigation features

QC 1

Alongside the Activa e, Honda has unveiled the QC 1, designed specifically for short commutes. This model features a fixed battery setup with a range of approximately 80 km per charge. Specifications include:
Battery Capacity: Fixed battery of 1.5 kWh
Rated Output: 1.2 kW
Maximum Output: 1.8 kW
Display: A simpler yet functional 5-inch LCD screen

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Ola Electric - Gig and S1 Z - A Series

Ola Electric has made a significant leap in the electric vehicle (EV) market with the launch of its new range of scooters and a portable inverter, aiming to enhance personal mobility and energy accessibility across India. The company unveiled the **Ola Gig**, **Ola Gig+**, **Ola S1 Z**, and **Ola S1 Z+** scooters, priced at ₹39,999, ₹49,999, ₹59,999, and ₹64,999 respectively.



Ather Energy Unveils 2025 Ather 450

The scooters now feature multi-compound tyres developed with MRF to boost both range and performance. Battery improvements in the 2025 models have extended the TrueRange™:

450X (3.7 kWh battery): 130 km TrueRange™ (161 km IDC)

450 Apex: 130 km TrueRange™ (157 km IDC)

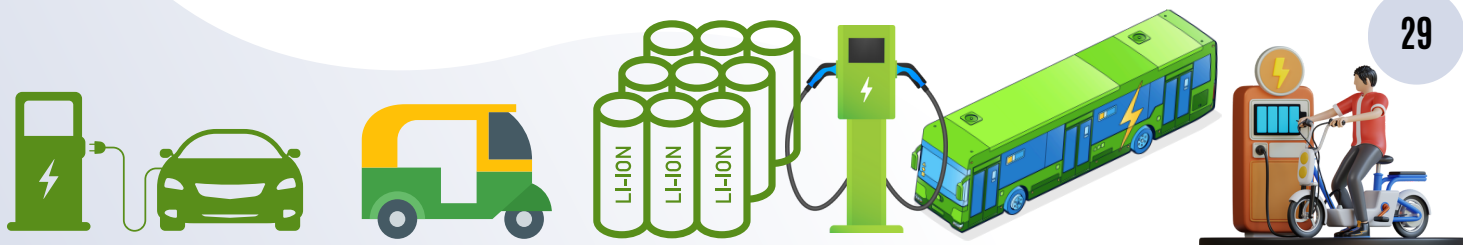
450X (2.9 kWh battery): 105 km TrueRange™ (126 km IDC)

450S: 105 km TrueRange™ (122 km IDC)



Rain Mode, Road Mode, Rally Mode

Powered by AtherStack™ 6 software with features like **Google Maps**, **Alexa**, **WhatsApp notifications**, and more!



New Launch



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Hyundai Motor India Ltd. - CRETA

The Hyundai Motor Company (현대자동차) Creta goes Electric. **Mr. Tarun Garg, Whole-Time Director and COO of Hyundai Motor India Limited**, stated that the Hyundai CRETA Electric represents a significant milestone as their first localized electric SUV, combining design, technology, and safety to inspire EV confidence in India.



Key Features and Specifications

✓ Battery Options:

Long Range (LR) — **51.4kWh (471km range)**

Standard — **42kWh (390km range)**

✓ Performance:

0 - 100 km/h in 7.9 seconds

Fast Charging: 10% to 80% in just 58 minutes (DC)

Wall Charger: 0 - 100% in 4 hours (11kW)

✓ Innovative Features:

Pixelated graphics on bumpers

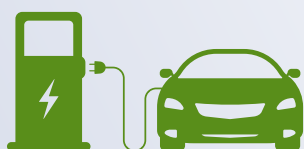
Active Air Flaps in the front bumper

Vehicle-to-load enabled

✓ Variants & Colors:

Available in 4 variants — Executive, Smart, Premium, and Excellence

Choose from 13 vibrant colors!



New Launch



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ZELIO Ebikes - Tanga Butterfly and Tanga SS

The **Tanga Butterfly** and **Tanga SS** are designed specifically for urban and semi-urban commuters, priced competitively at **INR 1,45,000** and **INR 1,40,000** respectively (ex-showroom).

The Tanga Butterfly is constructed from **mild steel (MS)**, while the Tanga SS is built using **stainless steel (SS)**. Both models are powered by a robust **1200W motor** coupled with a **48/60V 135Ah Eastman battery**, providing an impressive **range of 100 km** on a single charge and achieving a **top speed of 30 km/h**. Charging the battery takes approximately **8 hours**, utilizing an SMPS charger that includes voltage fluctuation protection to ensure safe and efficient charging.



Hyundai Ioniq 9

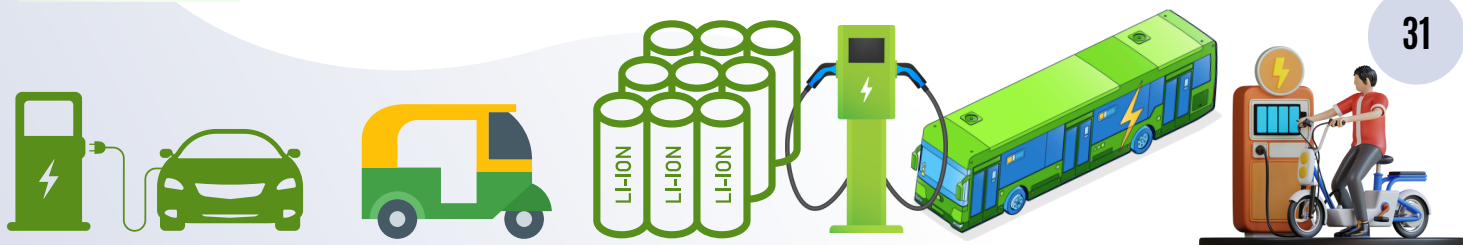
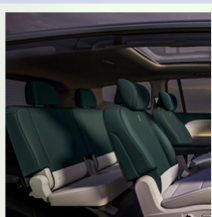
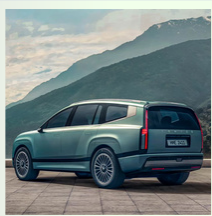
Hyundai Ioniq 9: A New Era in Electric Mobility

The Ioniq 9 is built on Hyundai's Electric Global Modular Platform (E-GMP), which also underpins the successful Ioniq 5 and Ioniq 6 models. This platform allows for versatile configurations and advanced technology integration, making the Ioniq 9 a standout in the growing electric SUV segment.



Key Features and Specifications

- **Powertrain Options:** The Ioniq 9 will be available in three configurations:
 - **Long Range RWD:** Single motor producing 217.5 hp and 350 Nm of torque.
 - **Performance AWD:** Dual motors delivering a combined output of 312.6 hp and 605 Nm of torque.
- **Battery and Charging:** Equipped with a robust **110.3 kWh battery pack**, the Ioniq 9 supports ultra-fast charging capabilities, allowing drivers to charge from **10% to 80% in just 24 minutes using a 350 kW charger**.
- **Interior Technology:** The SUV features a modern cockpit with a 12.3-inch instrument cluster and a matching infotainment display, enhancing user experience with intuitive controls and connectivity options.
- **Luxury Amenities:** The interior is designed for comfort, featuring swiveling second-row seats that improve accessibility to the third row, alongside advanced noise control systems that minimize road noise for a serene driving experience.
- **Safety Features:** The Ioniq 9 comes equipped with advanced driver assistance systems (ADAS), ensuring high safety standards that are becoming essential in modern vehicles.



Report - Guide to EV Charging Infrastructure and Grid Integration

Rising oil prices and rising energy demand have led to the high cost and capital consumption, as the transportation ecosystem's reliance on non-renewable energy sources has played an adverse role in recent years. The Government of India has developed a number of policies to encourage and facilitate the development of EV charging infrastructure in India.

The Indian government does not plan to mandate standardized charging ports for electric scooters, allowing manufacturers to use their own standards. This flexibility has resulted in a diverse charging infrastructure, posing challenges for EV owners in ensuring compatibility with public charging stations. Resulting in a varied landscape for EV charging infrastructure.

EV infrastructure encompasses **Level 1, Level 2, and DC fast chargers**, meeting diverse user needs, from home charging to rapid refuelling at public stations. AC charging is ideal for overnight charging at homes or workplaces with Level 1 & Level 2 standard chargers.

On November 7, 2023, the Ministry of Heavy Industries (MHI) introduced a new phased manufacturing program (PMP) for electric vehicle (EV) charger components under the **FAME India Scheme Phase-II** to boost domestic production. Outlined a comprehensive list of charger components and their timelines for the transition to domestically manufactured parts.

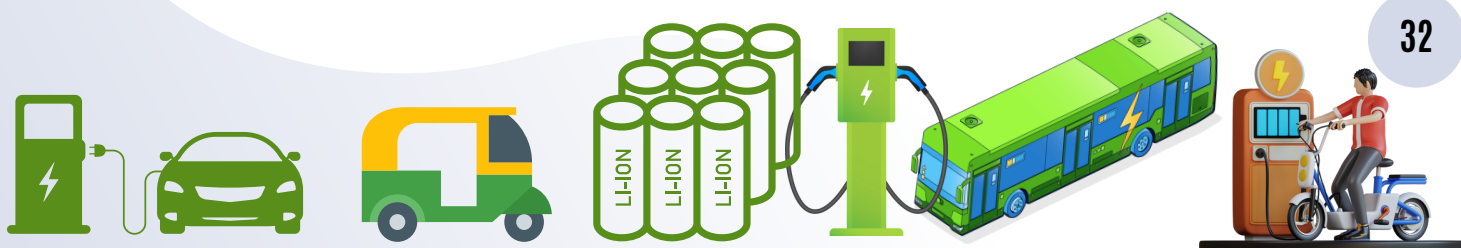
DC charging, including Level 3 fast chargers, is suitable for rapid charging in commercial areas, highways, and high-traffic locations. **Battery swapping** innovations offer quick alternatives, reducing downtime and addressing range anxiety. EVs can now be charged wirelessly via inductive or resonant systems, thanks to emerging technologies.

Smart grid integration optimizes charging times based on grid demand and renewable energy availability for efficient load management. Charging stations require reliable power, proper infrastructure, spacing, signage, safety features, and compliance with regulations and environmental guidelines. Balancing charging stations in urban and rural areas ensures widespread accessibility. Collaborations among governments, private corporations, and utility suppliers expedite infrastructure expansion by leveraging their assets. **Adhering to international charging standards** like CCS and CHAdeMO ensures interoperability among EVs and various charging stations through open communication protocols.

Obtaining **Environmental certifications** for charging stations and integrating solar and wind energy into infrastructure enhances sustainability and reduces EVs' carbon footprint.

In this article you will get the Idea of EV infrastructure promises a cleaner, more accessible world. Embrace the journey, where every charge fuels not just vehicles, but a greener tomorrow. The road ahead is electrifying, and the future is now.

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Report - Guide to EV Charging Infrastructure and Grid Integration

Annexures

1. EV Charging Infrastructure Strategy in India
 - a) Working Principle
 - b) Types of Charging
 - c) Charging levels
 - d) Speed of Charger
 - e) Fast Charging
 - f) Types of Connector
 - g) Battery Swapping
2. Grid Integration
 - a) Distribution from HV bus to charging station unit
 - b) Arranging supply
 - c) Planning & Requirements for Charging Station
 - d) Utilization of different segments
 - e) Benefits and Guidelines
3. Implementation of Charging Station
 - a) Planning and Allocation
 - b) Mode of Implementation
 - c) Indian Regulation and Standards
 - d) Costing and setting up EV public charging station (PCS)
 - e) Roles and Responsibilities
4. Communication Protocol
5. Smart-connected EV Charging
6. Government Initiatives and Schemes under Fame II

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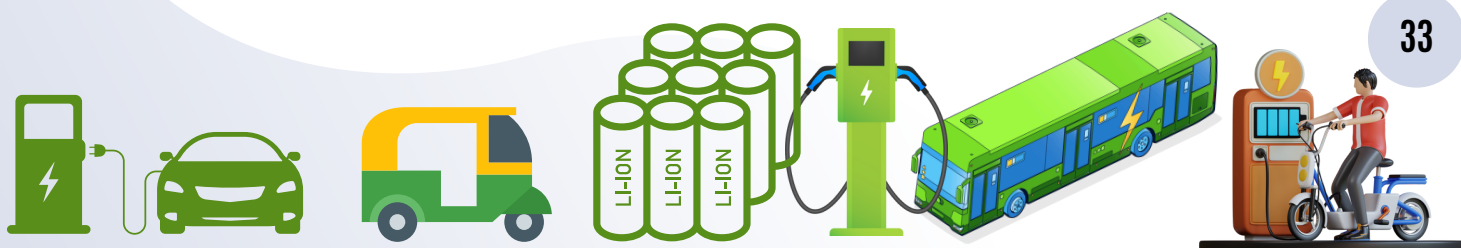
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Report - Guide to Basics of Semiconductor



The transition of from traditional internal combustion engines (ICE) to electric vehicles (EVs) marks a significant shift in the automotive industry, presenting both challenges and opportunities for individuals and businesses alike.

As the **Indian Automobile ecosystem adapts to this transformative trend from the conventional mechanical to electrification path**, it becomes **imperative for newcomers from mechanical backgrounds to familiarize themselves with the basics of semiconductors and its manufacturing process, a vital component in electrification roadmap.**

With **OEM's and Tier-1 suppliers gearing up to build their teams and capacities** in response to the growing demand for next generation mobility, **understanding the fundamental principles of semiconductors becomes crucial for effectively contributing to this dynamic industry.**

This **compiled report serves as an essential guide** commences with an introduction to **key PCB components, semiconductors**, explaining their role as materials that lie between conductors and insulators. It gets into the atomic structure of semiconductors and the concept of doping, which enhances their electrical properties. An exploration of semiconductor devices, such as **microcontrollers, microprocessors, transistors, IC's, diodes**, showcases their significance in electronic circuits and their impact on the efficient functioning of automobiles.

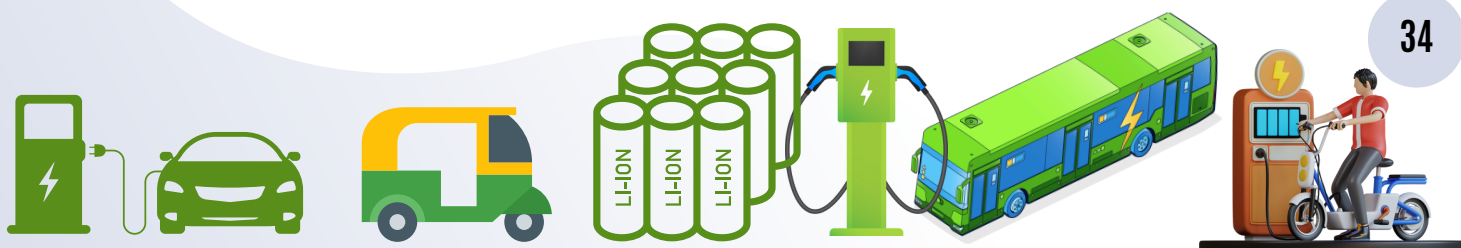
Next, the report briefs the **semiconductor manufacturing process**, Moore's Law and steps involved in producing integrated circuits in **fabrication facilities (fabs)**. It discusses the **distinction between fabs, foundries and IMD**, emphasizing their relevance in the current Indian semiconductor ecosystem, where suppliers are positioning themselves to cater to the surging demand for semiconductor chips in the EV market.

Semiconductors play an indispensable role in the efficient functioning of electric drivetrains, battery management systems and charging infrastructure.

As Indian Tier-1 suppliers slowly build their teams and capacity to meet the demands of the fast-growing Indian EV sector, there are **challenges and stiff competition** that are ahead and Government of India is supporting through with necessary research infrastructure and launching incentive schemes through "India Semiconductor Mission".

Overall, this **report guides new entrants transitioning from mechanical to electrification stream and focusing on the semiconductor domain** to navigate their transition successfully and empowering them to contribute effectively to the **growing Electrification in Indian Automobile ecosystem.**

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Report - Guide to Basics of Semiconductor

Report Content

1. Key Components on PCB

- a) Microcontrollers
- b) Microprocessors
- c) Hardware Interfacing

2. What is Semiconductor

- a) Semiconductor Devices
 - Transistors: IGBT, MOSFET
 - Integrated Circuits
 - Diodes
- b) Manufacturing Process
- c) Moore's Law

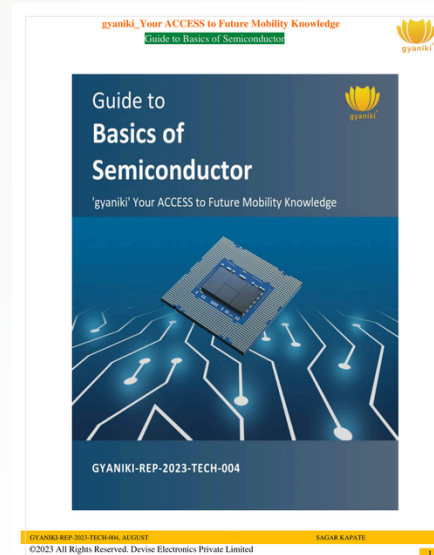
3. Key Terminologies and Processing Units

- a) Wafers
- b) Fabs
- c) Foundries
- d) IDM

4. Semiconductor Value Chain and Players

5. Semiconductor Products and Application

6. India's Semiconductor Mission (ISM) and Incentive Schemes



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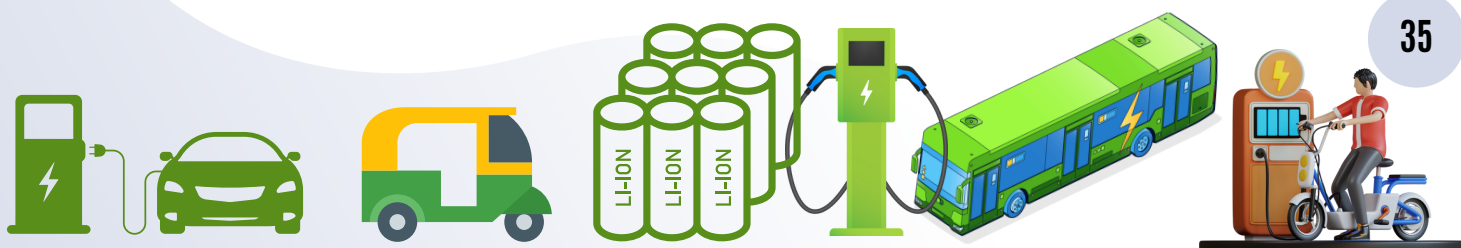
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