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ISO/SAE 21434 COMPLIANCE





INDIA EV SALES JULY 2025

TOP MONEY
MOVEMENT IN
MOBILITY WORLD





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UPCOMING EV SHOW & EXPO







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.

Gyaniki TECH TALKS - Inside India's Battery . Revolution I Siddhesh Gosavi



Watch this exclusive session from gyaniki TECH TALKS Ep. 71 where we hosted Siddhesh Gosavi, CEO & Co-Founder of Octarange Technologies, to deep dive into India's evolving battery tech landscape.

In this power-packed episode, Siddhesh presents a comprehensive overview of the Battery Value Chain, core innovations at Octarange, and insights into building fast-charged, fireproof batteries for EVs and energy storage systems.



Topics Covered in gyaniki TECH TALKS Discussion:

- Battery Value Chain Explained
- Core Technology Innovations at Octarange
- Battery Management Systems (BMS)
- Thermal Management System (TMS)
- Battery Digital Twin
- Automotive Battery Technology
- Energy Storage Systems (ESS)
- Containerized Battery Solutions
- Emerging Battery Trends & Q&A









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ISO/SAE 21434 Compliance



From In-Context to Off-the-Shelf: A Practical Guide to Component Integration in ISO/SAE 21434 Compliance

When developing automotive systems under the ISO/SAE 21434 standard for cybersecurity engineering, understanding the distinctions between in-context, out-of-context, and off-the-shelf (COTS) components is crucial for effective risk management and compliance. These concepts influence how cybersecurity requirements are defined, assessed, and integrated into vehicle development projects.

Understanding Component Contexts in ISO/SAE 21434

1. In-Context Components

In-context components are developed specifically for a defined vehicle or system environment, based on explicit requirements provided by the integrator (e.g., an OEM). These components are designed with a clear understanding of their operational environment, interfaces, and constraints. This allows for precise cybersecurity risk assessments and tailored security measures.

• Example: A custom-developed electronic control unit (ECU) designed for a particular vehicle model, with cybersecurity features implemented according to the vehicle's threat landscape and operational conditions.

2. Out-of-Context Components

Out-of-context components are developed generically, without a specific vehicle or customer context in mind. They are intended to be reused across multiple platforms or vehicle types. Because they are developed prior to integration, they come with assumptions about their operational environment, interfaces, and security requirements. These assumptions must be explicitly documented and validated by the integrator when incorporating the component into a specific vehicle.

• Example: A microcontroller or operating system developed to be used in various automotive applications, where the exact vehicle environment is not known at development time.

The key challenge with out-of-context components is that the integrator must perform a analysis to verify whether the component's assumptions hold true for the intended use. If not, a managed change process is required to ensure compliance with ISO/SAE 21434 cybersecurity requirements. This includes assessing the component's interfaces, threat exposure, and security controls to identify gaps and necessary adaptations.

3. Off-the-Shelf (COTS) Components

Off-the-shelf components are third-party products or libraries that are integrated without modification and were not developed specifically for the automotive context or the integrator requirements. These are often considered "black boxes" because their internal design a development processes are opaque to the integrator.

• Example: Open-source software libraries, commercial microcontrollers, or middleware components purchased and used as-is.

ISO/SAE 21434 Compliance



For COTS components, the integrator must analyze available documentation to determine if the component meets cybersecurity requirements or if additional security measures are needed. If documentation is insufficient or compliance cannot be demonstrated, further activities such as additional testing, validation, or compensating controls must be planned and executed to achieve conformity with ISO/SAE 21434.

Practical Implications and Examples

| Component Type | Development Context | Cybersecurity Approach | Practical Example |
|-------------------------|---|---|--|
| In-Context | Developed for specific vehicle | Directly tailored cybersecurity requirements and risk assessment | Custom ECU designed for a specific car model |
| Out-of-Context | Developed generically with assumptions | Reuse analysis to validate assumptions; managed changes if needed | Microcontroller OS used across multiple vehicle lines |
| Off-the-Shelf (COTS) | Purchased without modification | Documentation analysis; possible additional controls or validation | Third-party encryption library integrated as-is |

Example Scenario:

Suppose an automotive manufacturer wants to integrate a generic microcontroller OS (out-of-context) and an open-source cryptographic library (off-the-shelf) into a new vehicle:

- For the microcontroller OS, the manufacturer reviews the assumptions about its use, such as expected interfaces and update mechanisms. If the vehicle environment differs from these assumptions, the manufacturer must implement additional security controls or request modifications from the supplier to comply with ISO/SAE 21434.
- For the open-source library, the manufacturer evaluates the library's seculor documentation, known vulnerabilities, and update policies. If gaps are found, they might add security wrappers or monitor for vulnerabilities continuously to maintain compliance.

Automotive Cybersecurity Risk Management Solutions



READY TO IMPLEMENT A CYBERSECURITY MANAGEMENT SYSTEM (CSMS), BUT NOT SURE WHERE TO START?

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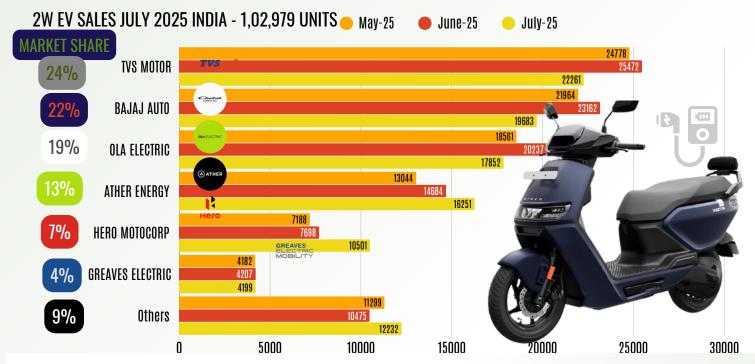




India EV 2W Sales July2025

TOP EV-2W Sales by OEM





India's electric two-wheeler (E2W) market delivered a record-breaking performance in July 2025, with retail sales soaring to **1,02,979 units**, The electric two-wheeler market in India continues to electrify the mobility landscape, clocking robust sales and rapid adoption at scale. Between May and July 2025, the sector showcased resilience, innovation, and fierce competition among industry leaders as well as agile startups. This article brings you a detailed analysis of recent monthly sales, market shares, and business highlights for the segment's frontrunners—focusing on the companies that are shaping future mobility in India.



India's Two-Wheeler Market Accelerates



IMarket YoY Growth: Electric vehicle sales reached 530,386 units in Q2 2025—marking a 34% YoY increase. Electric two-wheelers made up 56% of these figures, with monthly volumes holding above the 100,000 mark throughout May, June, and July.

Market Share (June 2025):

1.TVS: ~24% 2. Bajaj: ~22% 3. Ola: ~19% 4. Ather: ~14% 5. **Hero:** ~7%

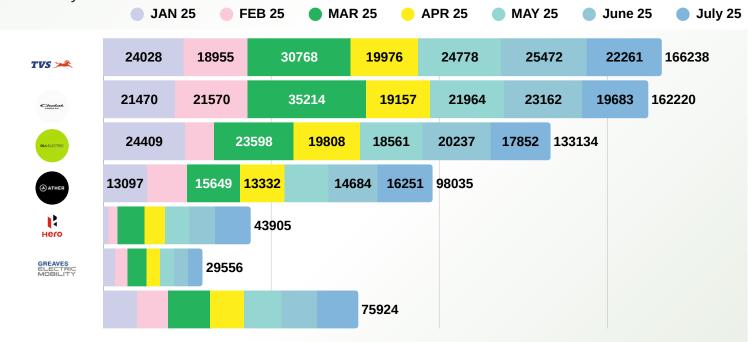
Month-on-Month Dynamics

June 2025 stood out with total electric two-wheeler sales topping 1.05 lakh units, up by 4.9% from May, despite the sector's usual dip during the monsoon onset.

Ather Energy showed notable momentum, growing from 13,044 in May to 16,251 in July—a 25%+ gain across the period.

Hero MotoCorp surged in July, jumping over 36% from June.

TVS and Bajaj remain industry benchmarks for scale and performance, consistently leading monthly sales.



Company Spotlights

TVS Motor Company Ltd

TVS, India's third-largest two-wheeler manufacturer globally, is renowned for quality and innovation. With a focus on sustainable mobility and a strong presence in over 80 countries, TVS 9 is a repeated JD Power winner for quality and customer service. Its aggressive push in the EV space is reflected in its unwavering sales leadership from May to July 2025.

India's Electric Two-Wheeler Market



Bajaj Auto Ltd

As the world's fourth-largest two and three-wheeler manufacturer, Bajaj Auto combines legacy, strong distribution, and R&D strength. It is India's leading exporter in the sector and holds a 26% global market share in two-wheelers. Bajaj's Chetak, their flagship EV model, has quickly gained consumer trust and broad market acceptance

Ola Electric Technologies Pvt Ltd

A disruptor-turned-mainstay, Ola Electric has invested heavily in advanced manufacturing and battery tech. Their "Futurefactory" is the largest electric two-wheeler factory globally. Despite facing volatility, Ola's innovation in design, charging, and direct-to-consumer retail continues to move the market

Hero MotoCorp Ltd

As the world's largest two-wheeler company, Hero's enterprising leap into EVs is starting to pay off, with a significant jump in July sales. Their manufacturing scale, trusted brand, and R&D-driven launches are making them a player to watch in this transformation

Greaves Electric Mobility Pvt Ltd

Backed by 165 years of engineering experience, Greaves focuses on democratizing sustainable mobility in two and three-wheelers. Their growing commitment to affordability and Made-in-India solutions is helping them win incremental market share

India's electric two-wheeler sector is in the midst of a transformation—balancing legacy muscle and startup dynamism. Market leaders like TVS, Bajaj, Ola, and Ather continually reassert their positions through tech innovation, reliability, and expanded consumer reach. With over 6.44 million registered EVs in India and sales growth holding steady even in typically slow months, the

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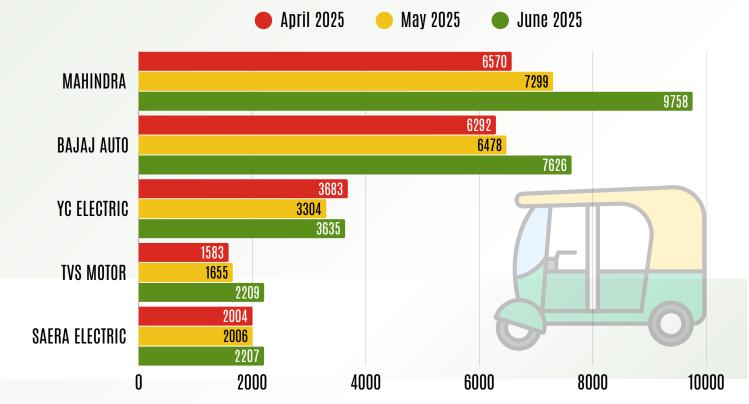


India EV 3W Sales July 2025

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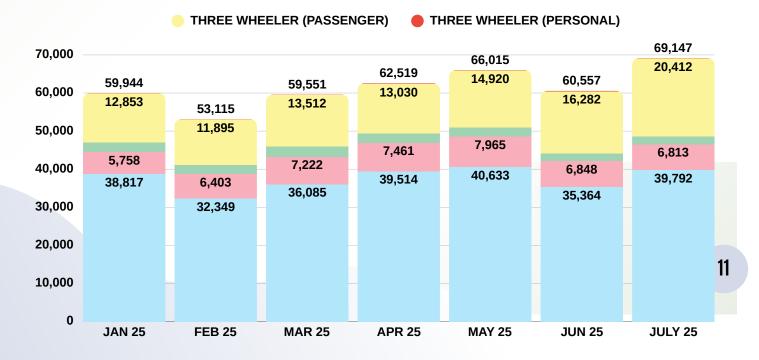
TOP EV 3W Sales Trend by OEM

EV 3W SALES JULY 2025 INDIA -69147 UNITS



The Indian mobility sector is experiencing an unprecedented transformation, with electric three-wheelers and e-rickshaws at the forefront. As eco-conscious policies, urbanization, and technological innovation converge, leaders like Mahindra, Bajaj Auto, and rising stars such as YC Electric, TVS Motor, and Saera Electric are driving the EV revolution. July 2025 saw market momentum reach new highs, reflecting both surging consumer demand and robust competition.





India EV 3W Sales July 2025



Monthly Sales Performance (May-July 2025)

- Mahindra Last Mile Mobility Ltd. led the market in July 2025 with a dramatic 33.7% month-on-month (MoM) sales jump, underlining its growing dominance—strengthened by a leading 9.3% overall electric three-wheeler market share and a staggering 55.1% in the L5 EV category.
- **Bajaj Auto Ltd.** continues as India's two- and three-wheeler powerhouse, sustaining robust growth both domestically and across 75 international markets.
- YC Electric Vehicle and Saera Electric Auto Pvt Ltd—specialists in e-rickshaw design and manufacturing—show steady upward trends, with Saera recently doubling production capacity to meet surging demand.
- TVS Motor Company Ltd. is making major strides in electric mobility, reflecting strong YoY growth and momentum built on decades of trust and innovation.

Category-Wise Market Trends (Jan-Jul 2025)

- Passenger e-rickshaws remain the largest sub-segment, while the three-wheeler (passenger) market saw explosive 25% growth from June to July.
- The overall electric three-wheeler penetration crossed a record 60.2% of sales in June 2025, up from 55.5% last year, signaling rapidly accelerating adoption rates.

Mahindra Last Mile Mobility Ltd. (MLMML):India's clear EV leader, with production tripled to meet demand for the Treo range and e-Alfa Super rickshaw/cargo variants. Current market share is 9.3% in electric three-wheelers and a dominant 55.1% in the L5 category. Strategic investments in manufacturing and R&D drive continuous innovation.

Bajaj Auto Ltd.:Global footprint in over 79 countries, annual turnover of \$3.5 billion+, and three state-of-the-art plants with a 5 million unit capacity.Strong R&D ensures customercentric product development and global competitiveness.

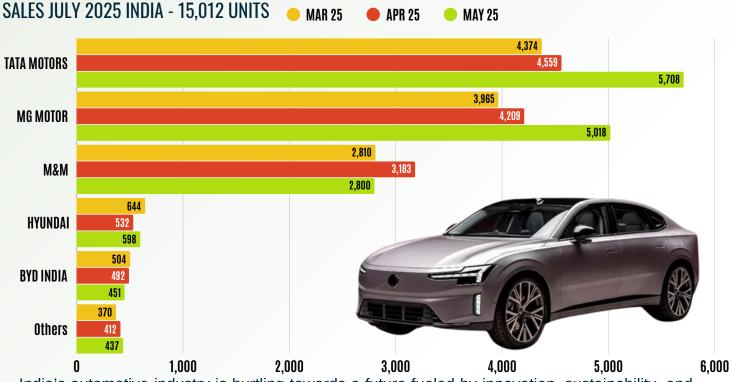
Saera Electric Auto Pvt Ltd.: Anticipates a 2X surge in annual revenue, expanding plant capacity across Haryana, Uttar Pradesh, and Rajasthan. Advanced R&D, new contract manufacturing agreements (e.g., with LML Electric), and aggressive dealer expansion demonstrate its growth ambition.

India's e-mobility transition is in full swing, led by visionary companies and driven by government incentives, tech innovation, and shifting consumer priorities. With Mahindra, Bajaj Auto, Saera Electric, YC Electric Vehicle, and TVS Motor all scaling new heights—and e-rickshaw/three-wheeler EV penetration hitting over 60%—the future of urban mobility is here and electrified. As market leaders ramp up capacity, introduce smarter 12 vehicles, and new challengers emerge, the coming year promises even more excitement for the industry.

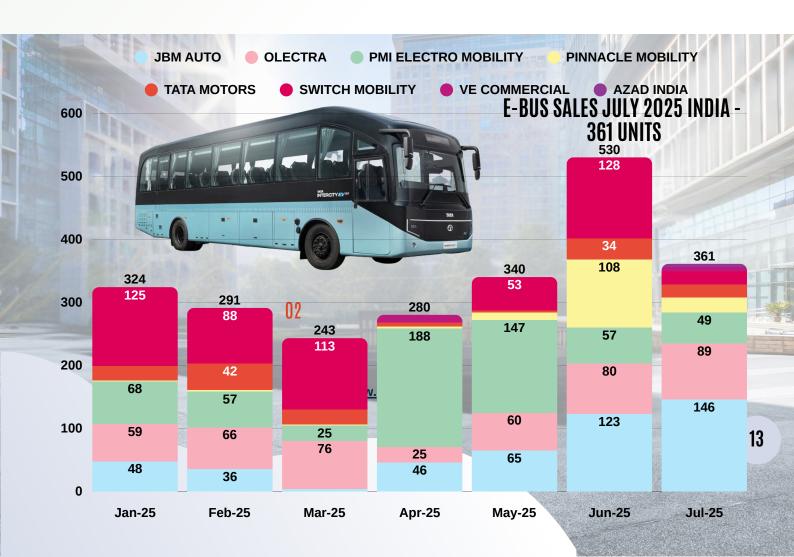
India EV Sales July 2025

EV 4W Passenger Sales Trend by OEM





India's automotive industry is hurtling towards a future fueled by innovation, sustainability, and customer-centric growth. The sales figures for May to July 2025 spotlight strong competition between legacy brands and emerging EV-centric manufacturers.



July 2025 Indian Passenger Vehicle Sales Strong Momentum for Future Mobility



Tata Motors, JSW MG, Mahindra & Mahindra, Hyundai, and BYD Lead the Charge as Market Shifts Toward EVs and SUVs

May-July 2025 Sales Highlights

The first half of 2025 has marked a pivotal period for India's electric four-wheeler market, with sales data revealing both surges and slowdowns among the country's leading automotive players. As the nation's EV adoption crosses new milestones, let's break down the numbers, spotlight key company strategies, and examine the trends shaping the future of mobility.

Monthly Sales & Growth: Company-wise Breakdown

- **Tata Motors** led the segment with a sharp jump in July, clocking 5,708 units and securing the top slot among EV and mainstream passenger vehicle makers. Its MoM growth of over 25% is a testament to portfolio strength and growing consumer trust in the Punch and Nexon lines.
- JSW MG Motor India recorded its best-ever monthly performance, scaling up by over 46%
 YoY to 6,678 units (overall) in July and nearly 20% MoM in the tracked passenger vehicle
 segment, powered by Windsor and ZS EVs. The company's push towards EV dominance is
 increasingly evident.
- Mahindra & Mahindra continues its robust run with 2,800 units (in this segment) in July, up YoY, thanks to new launches like the XUV 3XO REVX Series and ramped-up EV models, despite a marginal sequential decline from June.
- Hyundai Motor India rebounded after a June dip, reaching 598 units and recording an SUV share of 71.8% in its domestic mix for July—Hyundai's highest ever, underlining the SUV boom.
- BYD India remains a formidable force in premium EVs, even though sales tapered in July, reflecting a cautious but dedicated uptrend in the electric mobility space. BYD continues to target fleet and discerning personal buyers.
- The "Others" category—comprising newer and niche players—saw a modest climb, alluding to diverse customer appetite and a maturing Indian market.

Month-on-Month Growth Analysis:

- Tata Motors: May–July growth +30.5%
- JSW MG Motor India: May

 –July growth +26.6%
- Mahindra & Mahindra: YoY gain, but MoM July decline; overall strong fundamentals.
- Hyundai: Modest sequential improvement in July after two months of subdued numbers.
- BYD: Minor contraction, reflecting normalization after rapid expansion.

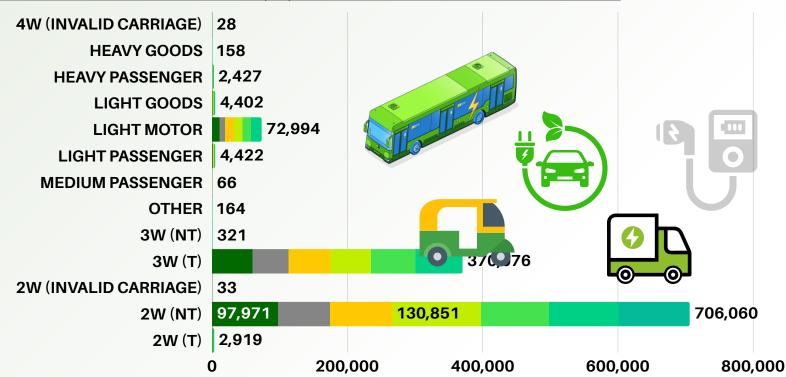
Market Share Snapshot - July 2025 (Tracking Segment Only):

- Tata Motors: ~25%
- JSW MG: ~22%
- Mahindra & Mahindra: ~12%
- Hyundai: ~2.6%
- BYD: ~2.0%
- Others: ~2%

India EV Sales Jan - July 2025 - Category-Wise

March 25
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EV SALES JULY 2025 INDIA - 1,88,934 UNITS



India's automotive industry is accelerating into a new era, fueled by a dynamic blend of technological advancement, shifting consumer behavior, and policy-driven sustainability. As the world's third-largest auto market, India's vision for future mobility is clear: smarter, cleaner, and more connected vehicles.

Jan-July 2025 Sales Performance Monthly Sales & Market Movement

In the first half of 2025, India's automobile sector saw around 6.54 million vehicles sold, reflecting a 4.84% year-on-year (YoY) growth by June. However, the industry noted an overall month-on-month (MoM) decline across most segments in June and July, echoing the cyclical nature of Indian automotive demand.

- **Two-Wheelers:** Largest contributor to vehicle sales. For June 2025, two-wheeler sales were at 1.44 million, a YoY growth of 4.73%, but a 12.48% MoM drop from May 2025.
- Top segments: Standard two-wheelers (NT) and e-rickshaws showed steady demand, with figures like 105,164 NT units in June and 102,680 in July.
- Passenger Vehicles: June 2025 saw sales of 298,000 units, up 2.45% YoY but down 1.49% MoM. Jan–June passenger vehicle sales reached 971,000 units (+2.59% YoY). SUVs/UVs now command 66% of this market.Light Motor Vehicles (LMVs) posted consistent volumes, hitting 13,391 in June and 15,012 in July.
- Commercial Vehicles: Sales hit 73,367 units in June, a 6.6% YoY rise but a 2.97% MoM decline, with heavy commercial vehicles slightly dipping MoM. Growth Rates & Standoup, Trend.

India EV Sales Jan - July 2025 - Category-Wise

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EV SALES JULY 2025 INDIA - 1,88,934 UNITS

Top Growers: Three-wheeler (T) sales saw strong momentum, peaking at 69,108 in July—a clear reflection of India's rising shared mobility preference. Light goods vehicles (LGVs) surged to 865 in July, the highest in the segment for the period.

Stagnant or Declining: Medium passenger vehicles and certain heavy vehicles remained volatile, sometimes reporting negligible or zero sales in some months.

Key Market & Technology Trends Defining 2025

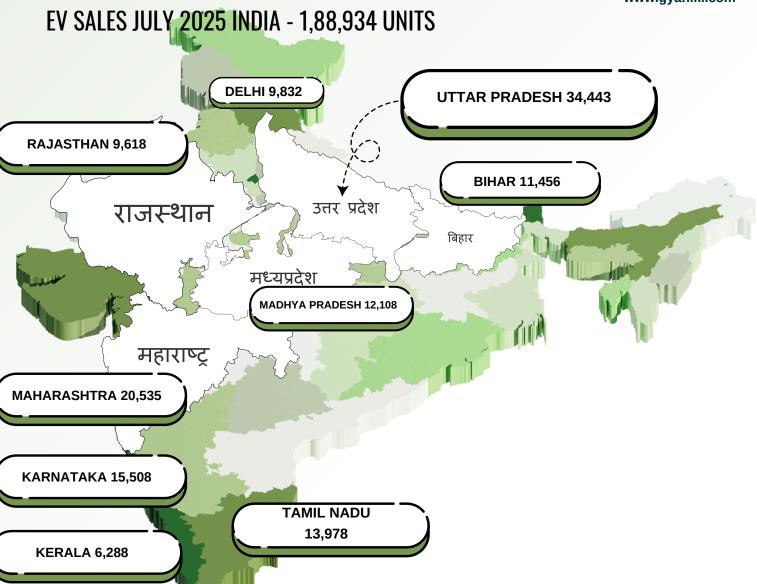
- **Electrification & Hybridization:** Electric and hybrid vehicles remain central, with increased focus on expanding infrastructure and more affordable models. Government initiatives push for 30% electric vehicle market share by 2030.
- Sustainability & Local Adaptation: New-energy vehicles, made for Indian conditions, are a key consumer focus amid accelerating climate concerns.
- Connectivity & Al Integration: The rollout of 5G-supported M2M connectivity and invehicle Al is set to redefine the in-car experience, improving efficiency, safety, and predictive maintenance.
- **Growth Drivers:** Surging rural demand, expanding shared mobility, and expanded reach of manufacturers are invigorating sales, especially in the two- and three-wheeler segments.

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State Wise EV Sales in July-2025





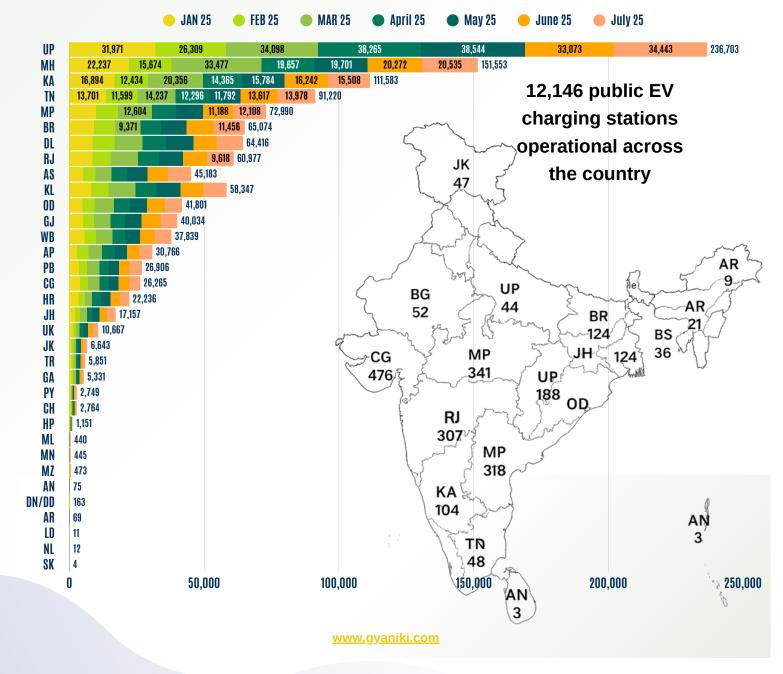
India's electric vehicle (EV) market continues to gain momentum across states. The first seven months of FY2025 have shown robust sales with dynamic state-wise performances. While Uttar Pradesh retained its leadership, several other states like Maharashtra, Karnataka, and Assam showed remarkable month-on-month (MoM) growth



State Wise EV Sales in June 2025



- Uttar Pradesh remains the EV capital of India, followed by Maharashtra and Karnataka.
- Maharashtra's March surge was the biggest single-month growth across all states.
- Assam, Bihar, and Odisha are emerging as significant EV markets in the East and North-East.
- Smaller states are showing positive adoption trends, expanding the EV ecosystem beyond metros.



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Venue: Research Park, IIT Gandhinagar







Date: August 22, 2025 - 4.00 P.M to 7.00 P.M

Venue: Crescent Innovation & Incubation Council, Chennai







Date: August 30, 2025 - 4.00 P.M to 7.00 P.M

Venue: IIM Bangalore Alumni Association (IIMBAA) Bangalore

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SITARC EV Foundation and Devise Electronics Forge Strategic Partnership



A New Era for Electric Vehicle Innovation and Skilling

The electric vehicle (EV) landscape in India is witnessing a transformative leap forward with the recent signing of a Memorandum of Understanding (MoU) between **SITARC EV Foundation and Devise Electronics**. This strategic partnership marks a significant milestone in the quest to **accelerate innovation**, **foster advanced skilling**, **and drive impactful solutions** within the rapidly evolving EV sector.



Key Pillars of the Collaboration

At the heart of this alliance lies a shared vision to empower the next generation of mobility through:

Benchmarking & Reverse Engineering of EV Components:

By leveraging cutting-edge methodologies, the partnership aims to analyze, deconstruct, and improve existing EV components, setting new benchmarks for quality and performance.

Design & Development Consultancy:

The collaboration will focus on creating high-efficiency motors and compact, cost-effective controllers specifically tailored for light electric vehicles—a segment poised for exponential growth in India's urban and rural landscapes.

Hands-on Training and Skilling Programs:

Recognizing the urgent need for skilled professionals in the EV ecosystem, SITARC EV Foundation and Devise Electronics will jointly roll out comprehensive training modules. These programs are designed to equip engineers, technicians, and students with practical knowledge and hands-on experience in EV technologies.

Resource Planning and Impactful Solutions:

Through joint resource planning, the partnership aims to deliver solutions that not on address current industry challenges but also anticipate future trends and requirements.

SITARC EV Foundation and Devise Electronics Forge Strategic Partnership



Leadership Driving the Initiative

This ambitious collaboration is steered by visionary leaders from SITARC EV Foundation:

- Mr. Sureandhar Viswanathan
- Mr. R. Karthikeyan (Director)
- Mr. K. Mohan Senthil Kumar
- Mr. Arun Ranganathan (Director

Their collective expertise and Commitment is instrumental in shaping the roadmap for sustainable and innovative mobility solutions.





Why This Partnership Matters Now

The Indian EV market is at a pivotal juncture, with government policies, consumer awareness, and technological advancements converging to create unprecedented opportunities.

1. Bridging the Skilling Gap

The EV industry's biggest bottleneck is the shortage of skilled talent. By prioritizing handson training, this partnership directly addresses the workforce gap, ensuring that India is not just a consumer but also a creator of world-class EV technology.

2. Fostering Homegrown Innovation

Reverse engineering and benchmarking will enable Indian companies to develop indigenous solutions, reducing reliance on imports and fostering self-reliance—a key goal under the "Make in India" initiative.

3. Supporting the Light EV Revolution

With two- and three-wheelers dominating India's EV adoption curve, the focus on efficient and affordable components for light EVs is both strategic and impactful.

4. Aligning with Global Trends

Globally, the EV sector is abuzz with advancements in battery technology, Al-driven vehicle management, and sustainable manufacturing. This partnership positions India to 21 not only keep pace with these trends but also set new standards.



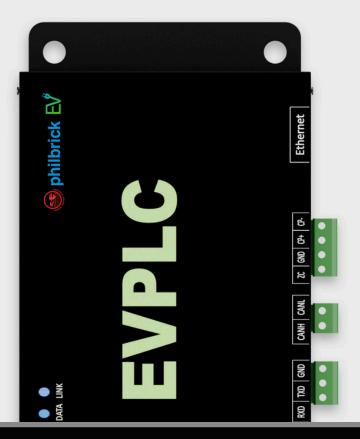




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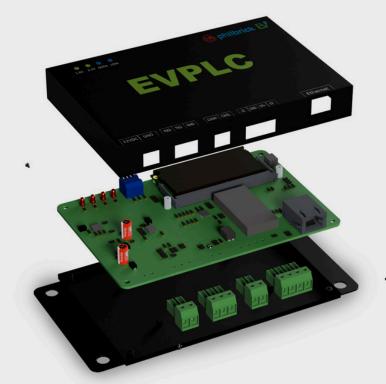
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Top Money Movement



Exide Industries Limited

Exide Industries Limited is stepping up big time in India's EV and energy storage game! With a fresh ₹100 crore equity boost to its subsidiary Exide Energy Solutions Ltd (EESL), the company is fueling the creation of one of the largest lithium-ion gigafactories in India—right in hashtag#Bengaluru!



Uno Minda



Uno Minda Limited has announced plans to establish a greenfield manufacturing facility for high-voltage electric powertrain components used in four-wheeler passenger and commercial vehicles. The board-approved investment aims to strengthen the company's capabilities in the electric mobility space, with an estimated project cost of **INR 423 crore**. The plant will initially be developed under Uno Minda Auto Innovations Private Limited, a wholly-owned subsidiary, and later converted into a joint venture with China-based Suzhou Inovance Automotive, subject to regulatory clearance. Uno Minda is expected to hold a 70 percent stake in the joint venture.

Transvolt Mobility

Transvolt Mobility has secured **\$20 million** in equity investment from the – IFC - International Finance Corporation, marking IFC's first-ever global equity investment in an EV fleet platform.



Attero



Attero, an Indian company specializing in e-waste and lithium-ion battery recycling, has announced plans to expand its rare earth element (REE) recycling capacity from 300 tonnes to **30,000 tonnes annually** over the next 12 to 24 months. The expansion will be supported by an investment of ₹100 crore and aligns with the National Critical Mineral Mission (NCMM), launched by the Government of India to reduce reliance on imports and strengthen domestic supply chains for critical minerals.



Top Money Movement



EV Funding

IFC's \$20 Million Boost to India's EV Freight Revolution!

A major leap for India's electric mobility landscape! The **IFC - International Finance Corporation**, a member of the The World Bank Group, has made its first-ever global equity investment in an EV fleet platform

Transvolt Mobility is the recipient of a \$20M infusion as part of its \$50M funding round, fueling its goal to deploy 3,500 electric commercial vehicles in the next 5 years. With this, the company will also help create 8,200 green jobs.



UP Govt

The Uttar Pradesh government has announced a groundbreaking initiative to develop a massive **500-acre Electric Vehicle (EV) Park** near Bhimsen, Kanpur, under the Kanpur Metropolitan Development Vision 2030.

- Estimated Project Cost: ₹700 Crores
- · Objective: Transform Kanpur into a major EV manufacturing hub
- Model: Public-Private Partnership (PPP)



GRIDSERVE

GRIDSERVE, one of the country's most relied-upon EV charging networks, has secured a massive £100 million equity investment from institutional giants TPG, Infracapital, and Mitsubishi.

MOTOR Ai

Berlin-based startup MOTOR Ai has raised \$20 million in seed funding to accelerate deployment of its explainable Level 4 AV technology—a full-stack autonomy system that thinks like the human brain.

- Unlike conventional black-box AI systems, MOTOR Ai's approach is rooted in neuroscience-based active inference, allowing traceable, structured, and regulation-aligned decision-making—a major breakthrough in today's safety-critical AV landscape.
- Already aligned with:
- √ ISO 26262 (ASIL-D)
- ✓ UNECE AV regulations
- ✓ GDPR & the EU AI Act
- ✓ Cyber Resilience Act



Top Money Movement



BillionE Mobility

BillionE Mobility has locked in 250+ long-term contracts to deploy medium- and heavy-duty electric trucks (12T to 55T GVW) across industries like:

- Currently operating 60+ heavy-duty e-trucks
- ✓ Backed by \$10 million in seed + debt funding, and now raising \$15M Pre-Series A
- ✓ Integrated ecosystem powered by ChargeZone
- Tapping into the ₹500 Cr PM E-DRIVE subsidy program up to ₹9.6L per e-truck §



Volt14 Solutions

Volt14 Solutions has successfully **raised** \$1.87M in a Pre-Series A round led by Blume Ventures, with strong backing from Beyond NEXT VENTŪRES., Spectrum Impact, Supermorpheus, and Cocoon Capital – taking their total funding to \$4.02M!



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FUTURE MOBILITY PARTNERS















Ather Energy

Department for Promotion of Industry and Internal Trade (DPIIT) and Ather Energy, reinforcing India's push towards clean mobility and EV manufacturing excellence . This strategic partnership under the 'Build in Bharat' initiative aims to:

- Empower deep-tech EV startups through mentorship & infrastructure support
- Launch joint innovation programs like the Bharat Startup Grand Challenge
- Enable field exposure, industry engagement, and participation in events like Startup Mahakumbh
- Support high-quality, Made-in-India hardware & EV components





EV Policy Delhi

Delhi's Transport Minister Pankaj Singh has officially announced the extension of Delhi's Electric Vehicle Policy until March 31, 2026, or until the new policy framework is finalized—whichever comes first.

Greaves Electric Mobility

Greaves Electric Mobility's Eltra City XTRA sets a new national benchmark with a 324 km run on a single charge, earning its spot in the India Book of Records during the Freedom Ride 2.0 event! Starting from GEML's tech centre in Bengaluru and ending at the Ampere factory in Ranipet, this remarkable feat highlights the evolution of India's electric 3-wheeler segment in both endurance

and technology.



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Electric Truck Subsidy

The Indian government has officially launched EV truck subsidies, aiming to fast-track sustainable logistics and reduce diesel dependency.

Key Benefits at a Glance:

- Up to ₹9.6 lakh subsidy per electric truck
- ₹5,000 per kWh of battery capacity
- Applicable for N2 & N3 category trucks (3.5 55 tonnes GVW)
- Tied to scrappage of old diesel trucks
- Valid till March 2026 or until funds last
- Backed by ₹500 crore allocation under PM E-DRIVE



Eco Planet Motors

Eco Planet Motors Pvt. Ltd. has achieved a significant milestone by securing CMVR Compliance Certification from Automotive Research Association of India (ARAI) for their first high-performance electric motorcycle – the EP8.0















BatX Energies

BatX Energies has joined hands with Rocklink GmbH (Germany) to bring rare earth magnet recycling to Indian soil for the very first time!

This collaboration will deploy Rocklink's Magcycle system for traceable collection and recycling of critical magnets like NdFeB and SmCo, found in EV motors and electronics.



Cityflo

A major shift in Future Mobility is rolling out on the streets of Delhi NCR as Cityflo, a premium mobility platform, joins hands with Aaveg, a leading fleet management provider, to launch their first electric bus fleet in the region.

- With a vision to electrify 20% of its fleet by FY26, this collaboration is not just about buses—it's about building a smarter, greener, and t ech-driven urban transit system.
- ☑ Cityflo will focus on customer experience, route planning & service.
- Aaveg will own & maintain the fleet.
- The e-buses, powered by EKA, are already operational on key routes like Rohini to DLF Cyber City and Sohna Road.
- Over 100 electric buses are set to be deployed



FedEx

FedEx has officially become the first international logistics company in Taiwan to roll out fully electric trucks for ground deliveries, in collaboration with FUSO. This bold step underscores their commitment to carbon neutrality by 2040 and sets a powerful example in the logistics and mobility space.









EV91Technologies Pvt Ltd

EV91Technologies Pvt Ltd officially launched its electric two-wheeler fleet operations in Delhi, marking a major milestone in its national expansion. With a dedicated service facility now operational in the capital, the startup aims to power India's transition to clean, inclusive, and accessible electric mobility



Adhesive Technologies

Adhesive Technologies, Inc, along with its logistics and EV retrofitting partners, has flagged off India's first commercial mid-haul re-powered electric truck operation. This pilot initiative strengthens India's vision of decarbonizing industrial corridors through cleaner transport solutions.

What's Under the Hood?

These re-powered trucks come fitted with a complete electric powertrain kit, delivering:

- Up to 8 tons payload
- ✓ 250 km range per charge
- \checkmark Emission savings of ~1,212 kg CO₂ per round trip (Chennai–Pune)
- Pilot Routes:

Chennai \rightarrow Pune (1,321 km)

Pune → Halol (713 km)















EVERTA

EVERTA Begins DC Charger Manufacturing in hashtag#Bengaluru.

EVERTA officially announced the launch of its DC charger manufacturing operations in India,

setting up a state-of-the-art facility in Bengaluru

The facility will manufacture 3,000 DC chargers annually by 2027, ranging from 60kW to 320kW+, targeting all segments — from 3-wheelers to commercial trucks.

This aligns strongly with Make in India and Atmanirbhar Bharat — aiming for 50%+ domestic value addition at launch and full localization in the future.

Over 400 direct & indirect jobs will be created in manufacturing, deployment, and servicing.



Maxvolt Energy

Maxvolt Energy Industries Limited has acquired 23,524 sq. meters of industrial land in Aligarh, UttarPradesh, with support from the UP MSME Department.

- A 5,200 metric ton/year lithium battery recycling plant in Phase 1
- Future expansion for higher recycling capacity
- A cutting-edge ESS battery pack manufacturing unit targeting 2 GWh output in 3 years
- This investment is a game-changer for India's clean energy transition, helping reduce battery waste, reclaim critical materials, and strengthen grid and EV infrastructure.

FUTURE MOBILITY PARTNERS





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Atlas Copco

Atlas Copco Tools and Industrial Assembly Solutions hosted its EVolution Days event at the company's Innovation Centre in Bavdhan, Pune. The event brought together over 110 stakeholders from the electric vehicle (EV) sector, including OEMs, Tier 1 suppliers, and line builders, to demonstrate technologies designed for EV manufacturing.







Schneider Electric

Schneider Electric is setting up a massive 500,000 sq. ft. facility at Horizon Industrial Parks , Hosur, Tamil Nadu.

This state-of-the-art plant will scale production of:

- 🔋 Battery Management Systems (**BMS**)
- Uninterruptible Power Supply (UPS) systems
- ♠ Power Distribution Units (PDU)
- Cooling products & electronic accessories

Strategically positioned on the Bengaluru–Chennai highway, it promises improved logistics, operational efficiency, and employment for 1,500+ professionals.

- Two-phase development with IGBC 'Platinum' pre-certification, featuring:
- Rooftop solar
- EV charging stations
- Energy-efficient HVAC, smart lighting
- ✓ Dust-free clean zones
- Green construction practices



ZF's CeTrax electric drive

ZF's CeTrax achieved a production milestone in May as the ten thousandth unit of the electric central drive rolled off the assembly line. ZF's compact e-drive is particularly suitable for electrifying conventional bus model platforms. In addition to bus manufacturers, the drive has also attracted other customer segments such as terminal tractors for yard applications. Designed with an open technology approach, CeTrax can be powered by both battery-electric and fuel cell systems.

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18 - 20 September 2025, Westin Hotel, Pune

TECHHIVE ROADSHOW

Empowering Mobility Startups

Your one-stop shop to showcase your products and services to the Investors, global and Indian Automotive market and its pioneers and enable great networking and fruitful business opportunities.

WHY SHOULD YOU JOIN?

What are the advantages of joining me, you might wonder..

- Ideal opportunity to present an innovation or technology
- Display your product(s), give a demo to the investors & delegates, and put on a show!
- An exclusively dedicated space for you to chat, network, and break a deal!
- · Increase your brand image and awareness
- New Customer Generation
- Higher Contact Quality
- · Differentiate yourself from the rest
- · Bring your key team members
- Hand out your product/services flyers & brochures to the attendees



Send us your demo proposal of 3 pages in double-column format (PDF) addressing: ilangois@saeindia.org

Registration fee

Start-up - 2m X 2m - INR 24,000 *

(*Extra GST 18%)

Fee includes:

- 2 delegate passes for all the 3 conference days (Pass includes Delegate kit, Lunch for 3 days, Access pass for Gala Dinner)
- Dedicated Roundtable for product display and B2B discussion





Technology Presentation:

Provide a genuine platform/stage in the form of 6th ITEC INDIA 2025 for the upcoming and present start-ups in the mobility ecosystem to present and showcase their technology and services to potential investors and the key stakeholders in the Industry and its leaders for achieving a smart and sustainable world.

Marketplace Expo:

Build an opportunity to network with the major organizations and stake holders for brand visibility and better engagement with Industry pioneers and stalwarts to get up and running in the mobility domain!



#startupindia

Joint Ventures & Partnerships



Maruti Suzuki India - DPIIT

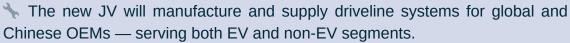
Maruti Suzuki India Ltd. signs a strategic MoU with DPIIT under the StartupIndia mission — forging a strong partnership aimed at nurturing next-gen mobility startups.

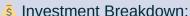
This collaboration will give DPIIT-recognized startups access to:

- Maruti Suzuki's innovation programs
- Hands-on mentorship & expert guidance
- Real-world test environments & manufacturing infrastructure
- Investor & accelerator networks

Sona Comstar - Jinnaite Machinery

Gurugram-based SONA BLW PRECISION FORGINGS LIMITED (Sona Comstar) is entering the world's biggest EV playground — China — through a strategic joint venture with Jinnaite Machinery Co., Ltd (JNT). This marks a bold move in the company's Asian expansion strategy!





✓ Sona Comstar: \$12 million

✓ JNT: \$8 million in assets & business

Why China? In 2024 alone:

V Over 11 million EVs sold

✓ 76% global EV market share by Chinese OEMs

6 million vehicles exported (up from 1 million in 2020)

Delta Electronics India - Compage Automation

Delta Electronics India and COMPAGE AUTOMATION SYSTEMS PRIVATE LIMITED have announced a strategic partnership through a Memorandum of Understanding (MoU) aimed at advancing the adoption of smart, efficient, and reliable electric vehicle (EV) systems in India's rapidly growing L5 electric auto (3-wheeler) segment. This collaboration is set to deliver high-performance, energy-efficient powertrain systems to the market, leveraging Delta's industry-leading BTDS motor controllers and encoder solutions, fully integrated with Compage's 100% Made in India Powertrain EV Solutions.











Joint Ventures & Partnerships



Bike Bazaar - e-Sprinto

Bike Bazaar EV Rentals has announced a strategic alliance with e-Sprinto to deploy 10,000 electric scooters across India, with a clear focus on the last-mile delivery market. The announcement was made during a rider safety & engagement event held at their Bengaluru facility — drawing participation from over 100+ riders, transport officials, and the local police force.



Horizon Fuel Cell - Shanghai Wuliu Automotive Technology

Horizon Fuel Cell Group has joined forces with Shanghai Wuliu Automotive Technology to deploy 100 hydrogen fuel cell systems for Z Truck's 42-ton zero-emission trucks.

- ◆ 1,500+ km Range on a Single Hydrogen Fill
- VL-III Fuel Cell Systems + Local Hydrogen Storage
- Global Validation Since 2022
- Next-Gen 400kW VLS-IV Stacks Coming Soon
- 20% Less Hydrogen Consumption Expected





LG Energy Solution - Toyota Tsusho

LG Energy Solution and Toyota Tsusho Corporation have formed a joint venture — Green Metals Battery Innovations, LLC — focused on battery recycling in North Carolina.

The facility, set to begin operations in 2026 in Winston-Salem, will process 13,500 tons of EV battery scrap annually, extracting valuable materials like nickel, cobalt, and lithium.

This venture is a key part of building a battery-to-battery circular loop, aimed at reducing dependency on virgin materials and cutting carbon emissions in the EV supply chain.









Joint Ventures & Partnerships



NexiGO Energy - Alium Batteries

Hyderabad-based NexiGO Energy has joined hands with Alium Batteries (USA) a subsidiary of 1776 Energy Group. This partnership is set to unlock cross-border opportunities in medical, industrial, power tools, and light EV segments — tailored for both Indian and US markets.



NexiGO, known for its innovation in BMS, battery packs, and EV chargers, will now explore global demand under this strategic alliance.



Montra Electric - Green Drive Mobility

Montra Electric, the clean mobility arm of the Murugappa Group, has joined forces with Green Drive Mobility to deploy 50 advanced EVIATOR electric small commercial vehicles (e-SCVs) across India over the next 3 months.

This phased rollout will support India's rapidly growing E

Gentari - Shell India

Gentari and Shell India have inked a strategic roaming partnership to integrate their EV charging networks across the country. Announced on July 10, 2025, this collaboration enables:

- ✓ Mutual access to 450+ charging points across India
- ☑ Gentari Go app users to charge at Shell Recharge stations
- ✓ Shell Recharge users to access Gentari's extensive network
- Enhanced reach in Western and Southern India
- Shell's EV stations to offer full-service experiences: food, beverages & more With over 3,000 Gentari charging points in India alone, this move is a strong push towards seamless interoperability and improved convenience for EV drivers.



Eastman Auto & Power Limited (EAPL) - Vande Bharat E-Vehicles

Eastman Auto & Power Limited (EAPL) has inked a ₹50 Cr annual MoU with Vande Bharat E-Vehicles to supply lithium-ion batteries, supercharging the electric three-wheeler revolution in India. ■

This strategic partnership focuses on battery leasing models, offering a cost-effective and scalable solution for commercial and fleet operators—especially those driving the heart of last-mile logistics across Indian cities.







Joint Ventures & Partnerships



Minda Corporation - Toyodenso Co., Ltd. (Japan)

Minda Corporation has announced a Joint Venture with Toyodenso Co., Ltd. (Japan) to deliver Advanced Automotive Switch Solutions across two-wheelers, passenger vehicles, and more.

This JV is not just about manufacturing—it spans the entire value chain, from design and development to marketing and production, right here in India. It's a leap forward in local innovation with global tech integration—fueling Make in India and the future of connected mobility.



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UPCOMING FUTURE MOBILITY EVENTS



EV INDIA EXPO 2025 11-12-13 SEPTEMBER, 2025 | India Expo Centre, Greater Noida, U.P., India



Auto Components Show 2025 11-13 Aug 2025 at Chennai Trade Centre, Nandambakkam, Chennai, Tamil Nadu.









Click Here to Know More

Renewable Energy India Expo 2025 will be held from 30th October - 1st November 2025 at India Expo Centre and Mart in Greater Noida, India. This is set to be a significant event showcasing India's advancements and future trajectory in the renewable energy sector. It is expected to feature a diverse range of products and solutions from over 800 suppliers and leading brands, including equipment, EPC solutions, solar panels, inverters, and IoT technologies. Connect with key stakeholders from around the globe, including manufacturers, suppliers, investors, and government representatives, to foster collaborations and partnerships.









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Kinetic DX

The legendary Kinetic DX returns, not as a memory, but as a future-ready electric avatar — starting at just ₹1.11 lakh!

Reimagined for the modern commuter, the all-new Kinetic e-Luna DX+ blends iconic design with cutting-edge EV tech:

Peak Range: 116 km (IDC)

Battery: Rugged 2.6kWh LFP – built for Indian weather

Motor: 4.8kW hub-mounted

Top Speed: 90 km/h with 3 riding modes – Range | Power | Turbo





Lohia Auto - Youdha EPOD Electric L5 passenger three-wheeler ₹2.79 lakh (ex-showroom).

🔋 Range: 227 km

🔋 Battery: 11.8 kWh LFP

Motor: 6 kW

→ Torque: 50+ Nm





WORLD'S FASTEST MG

AN INTRODUCTORY PRICE OF

₹74.99 LAKH

















Piaggio Vehicles Pvt. Ltd. Apé E City Ultra

Apé E-City Ultra

Range: 236 km

→ Power: 9.55 kW | Torque: 45 Nm

Battery: 10.2 kWh LFP with Prismatic Cells

§ Price: ₹3,88,000 (ex-showroom)

Piaggio Vehicles Pvt. Ltd. Apé E-City FX Maxx

♦ Apé E-City FX Maxx

Range: 174 km

→ Power: 7.4 kW | Torque: 30 Nm

Battery: 8 kWh with Prismatic Cells

§ Price: ₹3,30,000 (ex-showroom)







VIDA VX2

Range Upto: 142 km

Acceleration: 0-40 in 3.1 sec Top Speed Upto: 80 kmph

Removable Batteries : upto 2units



TVS iqube 3.1















Ather Rizta S 3.7kWh launched at Rs 1.38 lakh

The Rizta S 3.7kWh gets a larger battery pack, fewer features and a lower price tag.

• 159km IDC range

7-inch LCD screen, auto hold

• turn-by-turn navigation







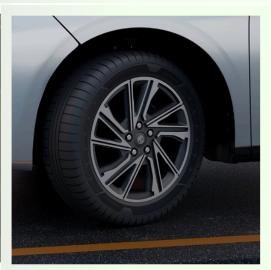












Report - Guide to EV Charging Infrastructure and Grid Integration



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.



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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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.

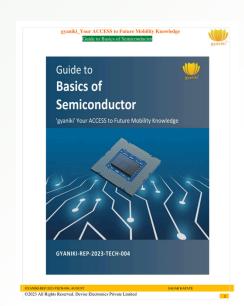


Report - Guide to Basics of Semiconductor



Report Content

- 1. Key Components on PCB
 - a) Microcontrollers
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 - a) Semiconductor Devices
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- 4. Semiconductor Value Chain and Players
- 5. Semiconductor Products and Application
- 6. India's Semiconductor Mission (ISM) and Incentive Schemes



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gyaniki | Your Access to Future Mobility

About gyaniki

'gyaniki' is a technology platform that provides complete coverage of the current & evolving "ACCESS" [Autonomous, Connected, Customized, Electrified, Safe, Shared] to "Future Mobility".

'gyaniki' has evolved as a technology based digital portal platform created for researchers, product developers, industry professionals and academia members with a vision of incremental expansion in bridging the future mobility ecosystem through our services.

'gyaniki' undertakes specialized and customized research in Future Mobility

Our techno-commercial research covers on the core areas of:

- Benchmarking
- · Key Components and Process
- · Technologies
- Manufacturers and Suppliers
- Latest & upcoming industry trends (LiDAR, Neural Networks, Sensor fusion)
- Product Development Processes and Documentation (DFMEA, PFMEA, RCA)
- Tools of the trade. In design, simulation & validation (e.g.: GT suite, Simulink)
- Standards, Testing & Regulatory information.

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