Work Experience Project – 1 Atliq Motors EV

Presented By : Shikhar Singh

- Introduction
- Problem statement
- Dashboard preview
- Primary research questions
- Secondary research questions
- Recommendations
- Conclusion

AtliQ Motors: Strategic Expansion into India

🏢**Company Overview:**

•**AtliQ Motors** is a U.S.-based automotive leader, renowned for:
- Cutting-edge **Electric Vehicles (EVs)** and **Hybrid Technology**.
- A strong focus on **sustainability**, **performance**, and **innovation**.

•Currently holds a **25% market share** in the North American EV/hybrid vehicle segment.

🌍 **Why India?**

•India presents a **rapidly growing EV market**, driven by:
- Government initiatives and incentives.
- Rising consumer interest in sustainable transport.

•AtliQ Motors' market share in India is **currently below 2%**, indicating **huge growth potential**.

🚀 **Expansion Strategy**

•Plan to **introduce bestselling EV and hybrid models** to the Indian market.

•The goal: **Increase presence**, **capture market share**, and **compete with local and global EV manufacturers**.

Leadership Insight

•**Bruce Haryali**, Chief of AtliQ Motors India, is leading the expansion effort.
•He emphasizes the need for a **data-driven market strategy** before launching.

📈 Data-Driven Decision Making

•A comprehensive **market research initiative** was launched to study:
- Current EV/hybrid adoption trends.
- Competitive landscape.
- Consumer behavior and preferences.

•The task was assigned to the **Data Analytics Team** at AtliQ Motors.

👨‍💻 Meet the Analyst

•**Peter Pandey**, a skilled data analyst on the team, is:
- Responsible for compiling and analyzing relevant Indian market data.
- Expected to deliver **insights** to guide AtliQ's expansion roadmap.

• Problem Statements: 

problem_statement.pdf

57M
Total Vehicles

2M
Total EV

3.61%
Penetration Rate

93.91%
EV_CAGR

Home

State View

Fiscal Year & Quater
- 2022
- 2023
- 2024

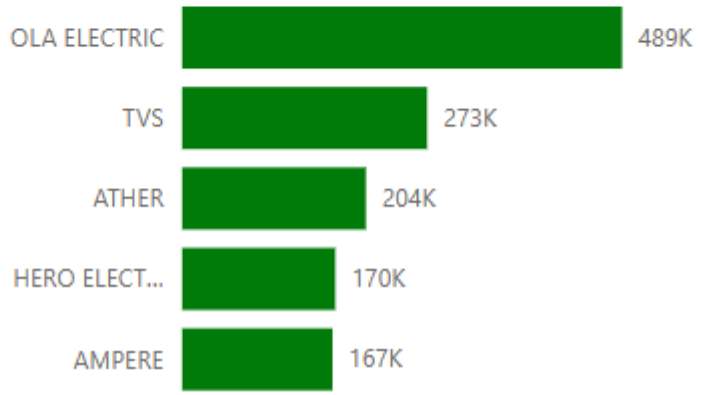
Maker
All

State
All

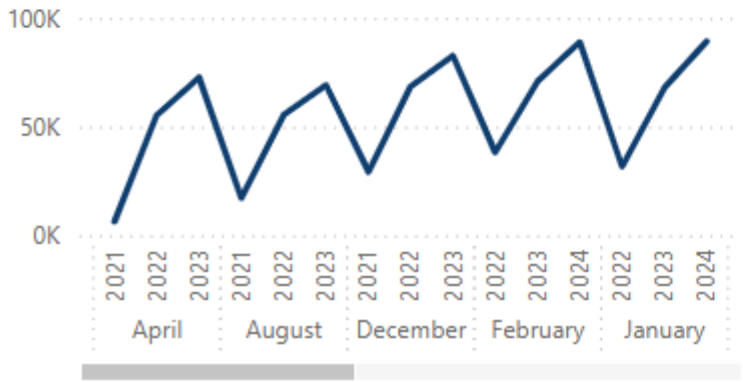
Vehicle Category
2-Wheelers

4-Wheelers

Top 5 EV Sold by Maker



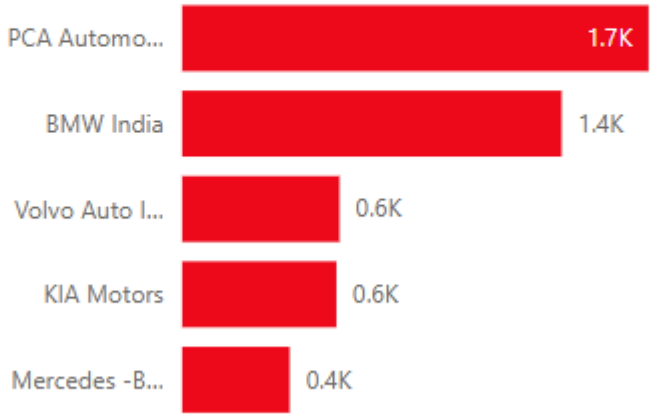
Peak and low season months for EV sales



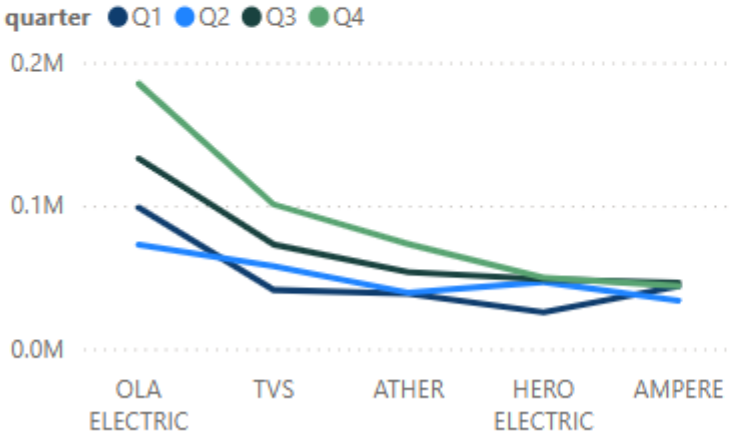
CAGR For Top 5 Markets

Maker	Sum of EV_Sold	CAGR
OLA ELECTRIC	489473	373.22%
TVS	272575	330.80%
ATHER	204449	132.04%
AMPERE	167274	46.01%
HERO ELECTRIC	170394	-58.52%

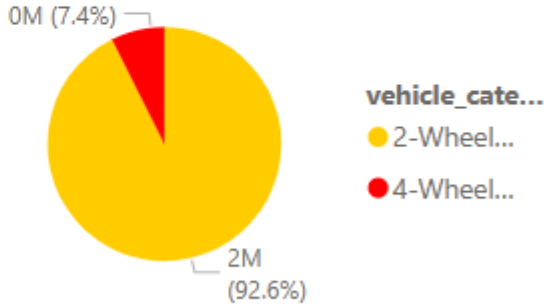
Bottom 5 EV Sold by Maker



Quaterly Trends Based On Sales Volume for the top 5 EV makers



EV Sold by Vehicle Category



13.53%
Total CAGR

93.91%
EV CAGR

54.21M
Proiected Sales 2030

392bn
Total Revenue

Home

Maker View

Fiscal Year & Quater
- 2022
- 2023
- 2024

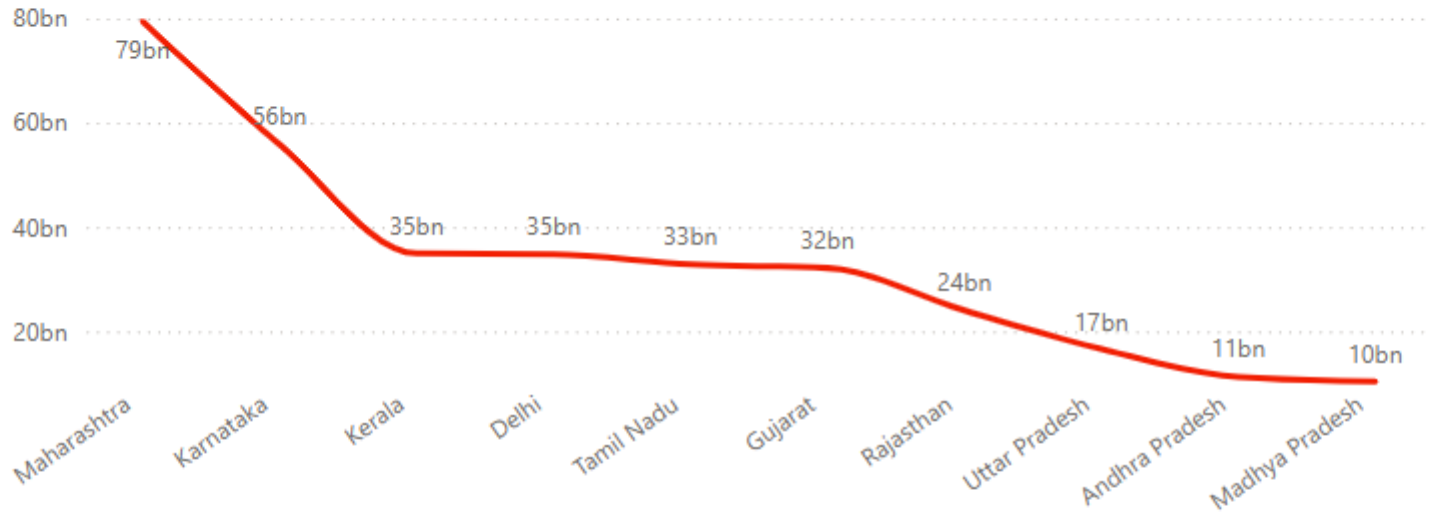
Maker
All

State
All

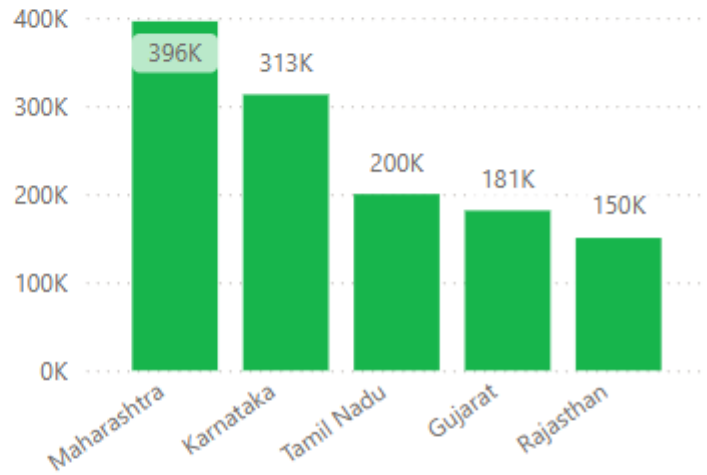
Vehicle Category
2-Wheelers

4-Wheelers

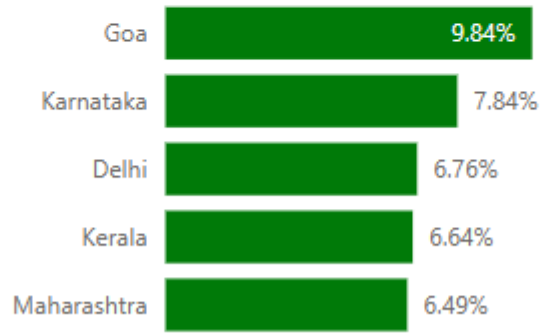
EV_Revenue By States by State



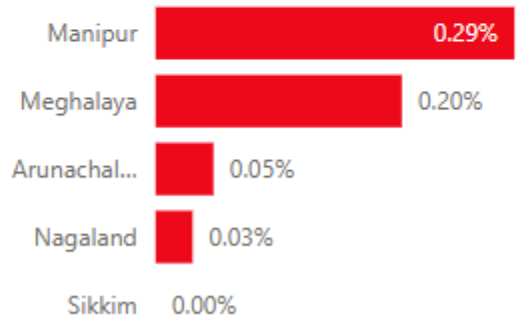
Top 5 States By EV Sold



Top 5 State by Penetration Rate



Bottom 5 State by Penetration Rate

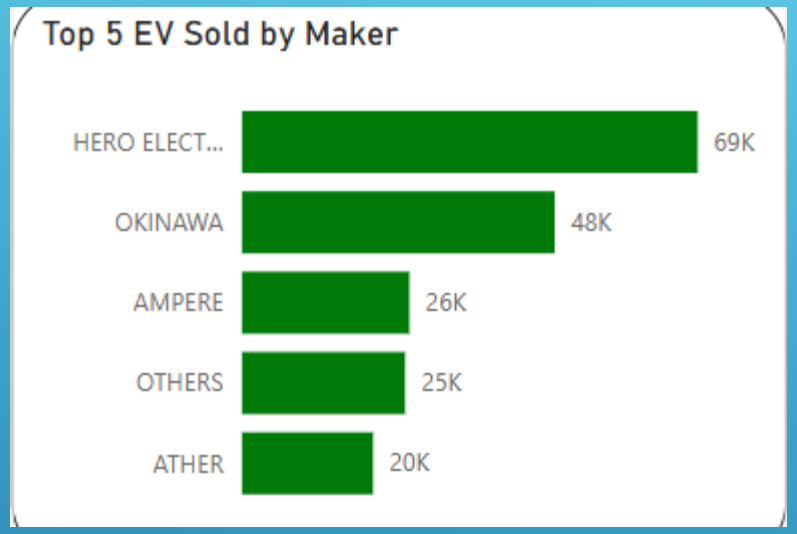


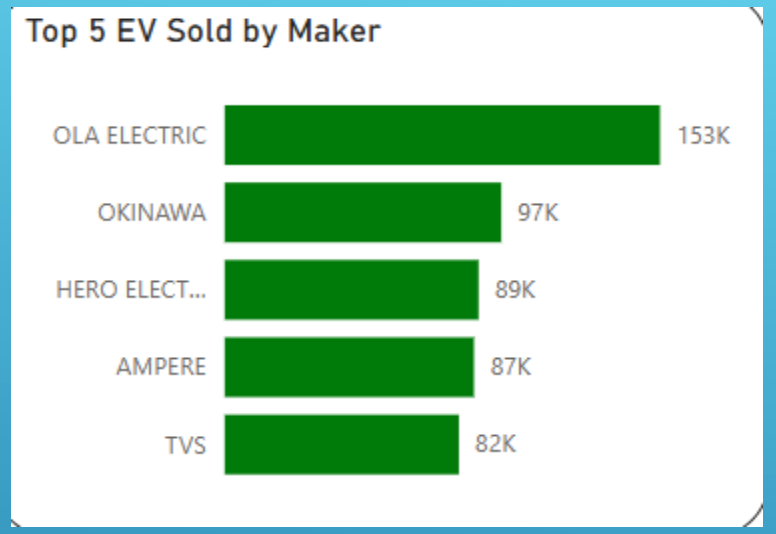
Top 10 States with Projected EV Sales in 2030

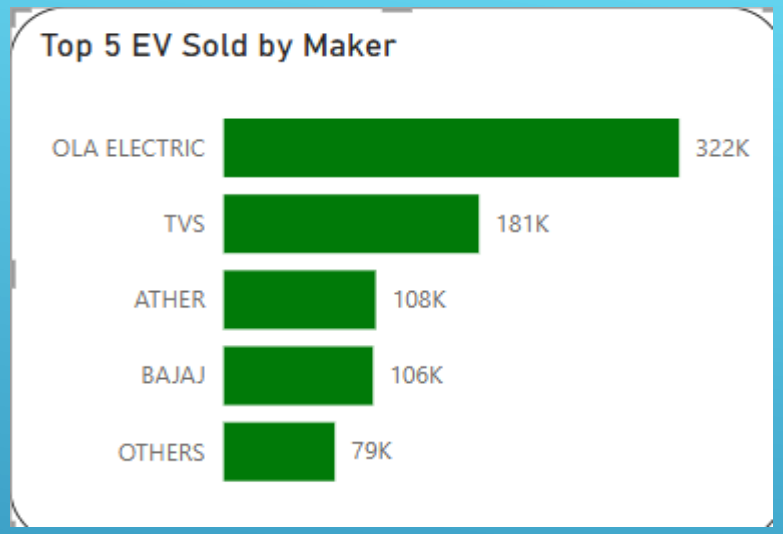
State	Penetration Rate	EV_CAGR	Projected Sales 2030
Maharashtra	6.49%	101.89%	13.35M
Kerala	6.64%	132.83%	11.78M
Gujarat	4.40%	116.33%	8.65M
Karnataka	7.84%	93.24%	8.38M
Odisha	4.63%	102.94%	2.73M
Goa	9.84%	146.45%	2.42M
Rajasthan	4.55%	81.87%	2.40M
Tamil Nadu	4.30%	59.95%	1.58M

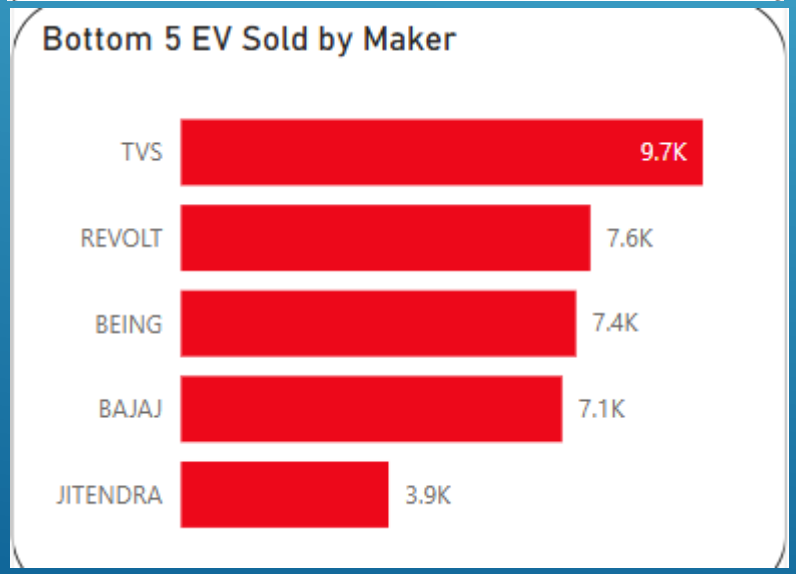
Preliminary Research Questions

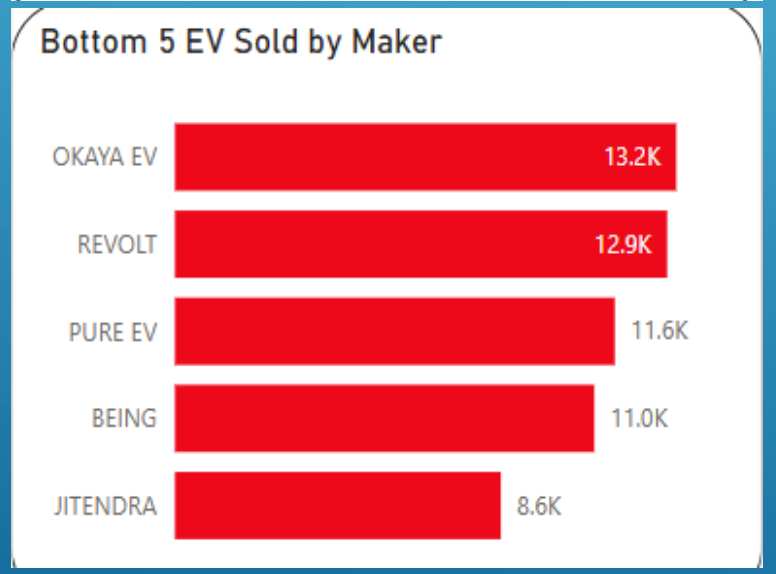
1. List the top 3 and bottom 3 makers for the fiscal years 2023 and 2024 in terms of the number of 2-wheelers sold.

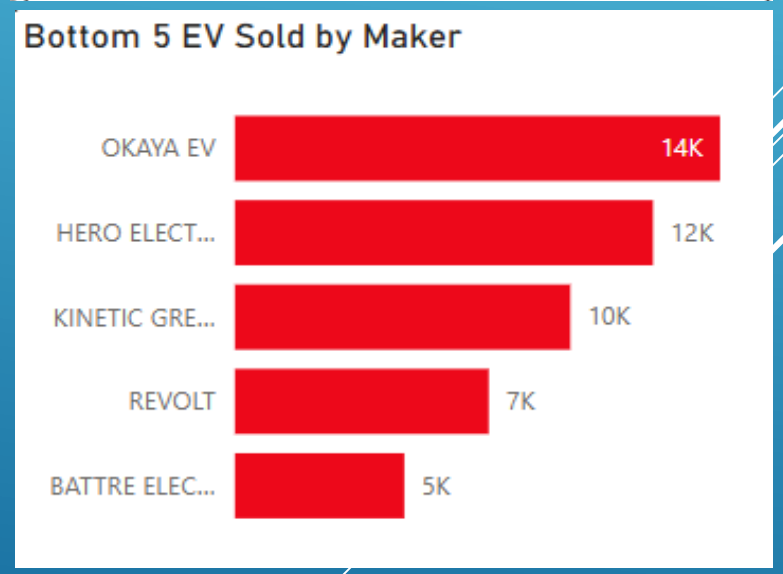












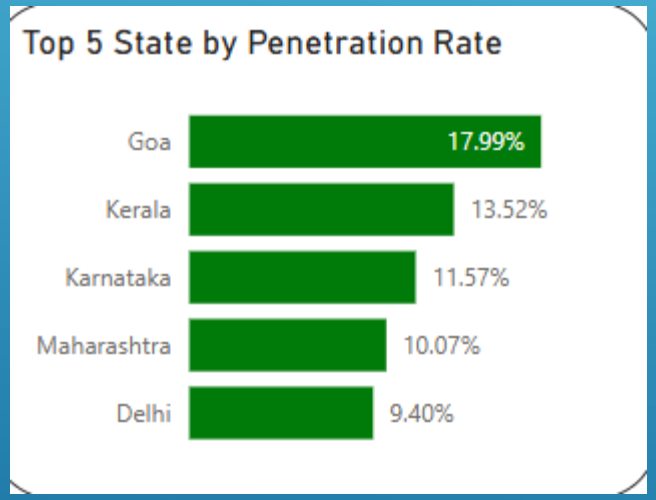
Fiscal Year 2022

Fiscal Year 2023

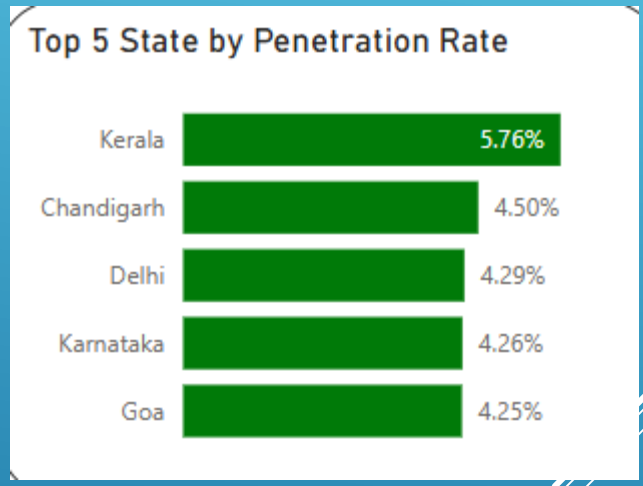
Fiscal Year 2024

2. Identify the top 5 states with the highest penetration rate in 2-wheeler and 4-wheeler EV sales in FY 2024.

2 - Wheelers



4 - Wheelers

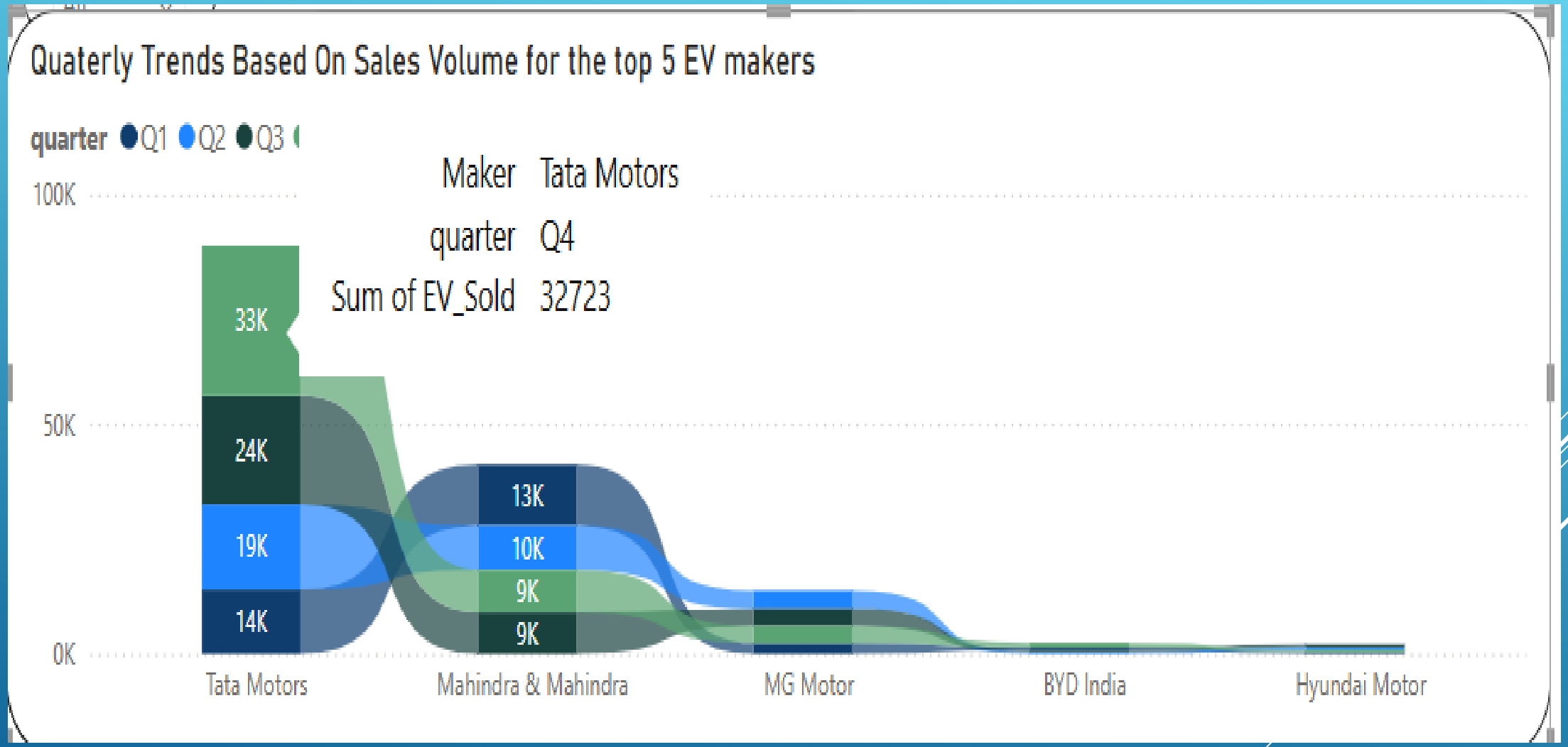


3. List the states with negative penetration (decline) in EV sales from 2022 to 2024?

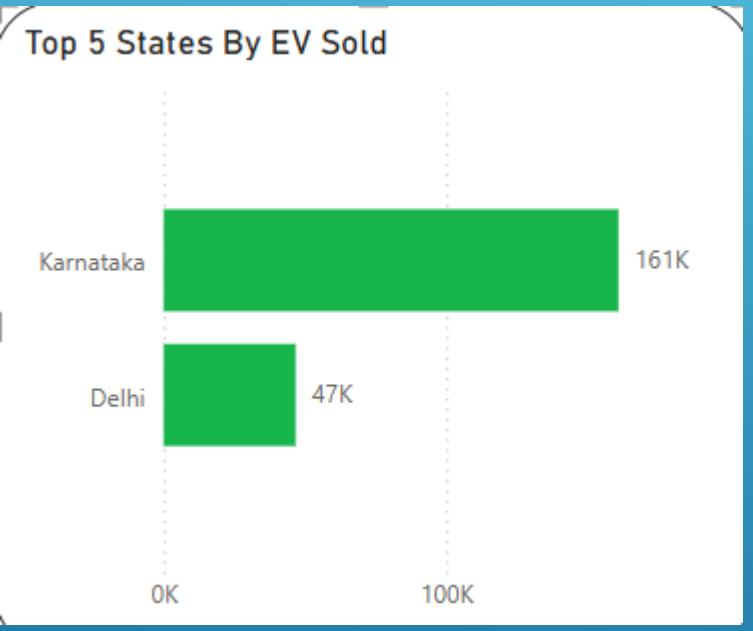
State	Penetration_Change(22-24)
Nagaland	-0.00%
Ladakh	-25.65%
Total	**-1.07%**

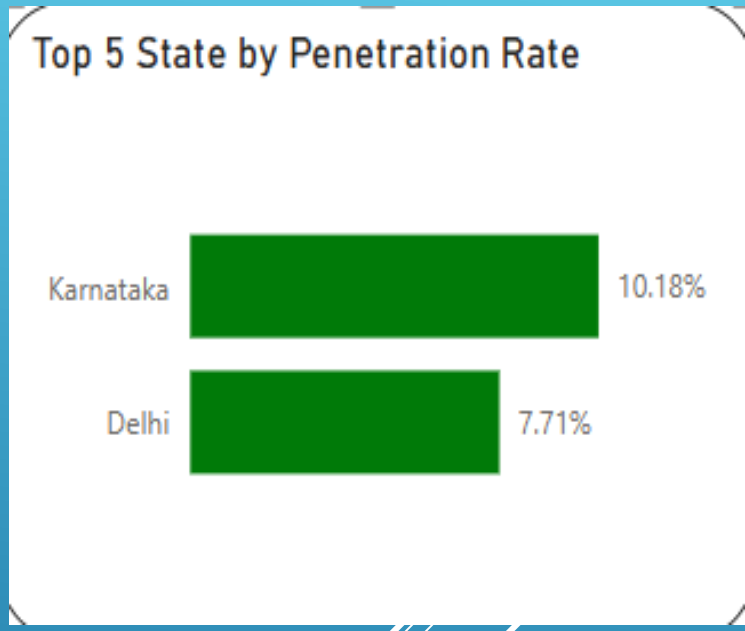
State	Penetration_Change(22-24)
Andaman & Nicobar Island	-2.00%
Total	**-2.00%**

4. What are the quarterly trends based on sales volume for the top 5 EV makers (4-wheelers) from 2022 to 2024?



5. How do the EV sales and penetration rates in Delhi compare to Karnataka for 2024?





6. List down the compounded annual growth rate (CAGR) in 4-wheeler units for the top 5 makers from 2022 to 2024.

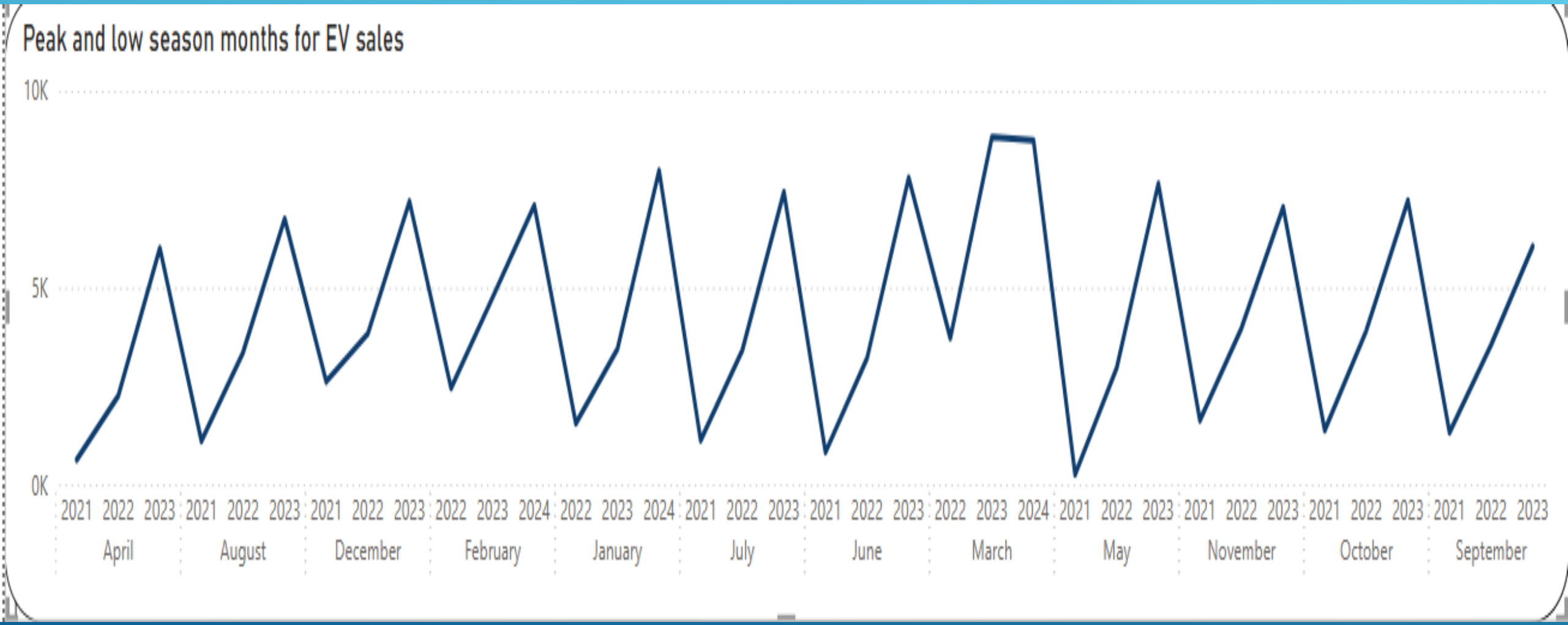
CAGR For Top 5 Markets

Maker	Sum of EV_Sold	CAGR
Tata Motors	88935	94.71%
MG Motor	13753	131.53%
Mahindra & Mahindra	41193	140.33%
Hyundai Motor	2076	255.48%
BYD India	2419	566.52%

7. List down the top 10 states that had the highest compounded annual growth rate (CAGR) from 2022 to 2024 in total vehicles sold.

State	Sum of electric_vehicles_sold	EV_CAGR
Chandigarh	5279	164.58%
Chhattisgarh	53804	150.89%
DNH and DD	355	137.85%
Goa	19684	146.45%
Madhya Pradesh	78979	133.67%
Meghalaya	177	476.63%
Nagaland	13	200.00%
Tripura	562	229.50%
Uttar Pradesh	95203	137.70%
West Bengal	30560	150.62%
Total	**284616**	**141.24%**

8. What are the peak and low season months for EV sales based on the data from 2022 to 2024?



9. What is the projected number of EV sales (including 2-wheelers and 4 wheelers) for the top 10 states by penetration rate in 2030, based on the compounded annual growth rate (CAGR) from previous years?

Top 10 States with Projected EV Sales in 2030

State	Penetration Rate	EV_CAGR	Projected Sales 2030
Maharashtra	6.49%	101.89%	13.35M
Kerala	6.64%	132.83%	11.78M
Gujarat	4.40%	116.33%	8.65M
Karnataka	7.84%	93.24%	8.38M
Odisha	4.63%	102.94%	2.73M
Goa	9.84%	146.45%	2.42M
Rajasthan	4.55%	81.87%	2.40M
Tamil Nadu	4.30%	59.95%	1.58M
Delhi	6.76%	68.10%	1.05M
Chandigarh	4.04%	164.58%	0.99M

10. Estimate the revenue growth rate of 4-wheeler and 2-wheelers EVs in India for 2022 vs 2024 and 2023 vs 2024, assuming an average unit price. H

Vehicle_category	Average Price
2-Wheelers	₹ 85,000.00
4-Wheelers	₹ 15,00,000.00

269.28%

Revenue_Growth_Rate 2022 vs 2024 (2W)

28.13%

Revenue_Growth_Rate 2023 vs 2024 (2W)

367.79%

Revenue_Growth_Rate 2022 vs 2024 (4W)

83.08%

Revenue_Growth_Rate 2023 vs 2024 (4W)

Secondary Research Questions

1. What are the primary reasons for customers choosing 4-wheeler EVs in 2023 and 2024 (cost savings, environmental concerns, government incentives)?

1. Cost Savings:

- **Fuel Efficiency:** EVs are far more efficient than internal combustion engine (ICE) vehicles. They consume significantly less energy per kilometer, reducing fuel expenses dramatically—especially in cities with frequent stop-and-go traffic.
- **Low Maintenance:** EVs have fewer moving parts—no engine oil, fewer fluids, and no exhaust systems. This leads to **lower maintenance costs** and **fewer service visits**, making them more economical in the long run.

2. Environmental Concerns:

- **Zero Emissions:** 4W EVs produce **no tailpipe emissions**, helping reduce air pollution in heavily congested urban areas. This contributes directly to better public health and environmental outcomes.
- **Sustainability Appeal:** With rising awareness around climate change, EVs are viewed as a **clean, future-ready alternative** to ICE vehicles. Consumers are increasingly motivated by environmental responsibility and sustainable living.

3. Government Incentives:

- **Financial Support:** Most states and the central government offer **subsidies**, **income tax benefits**, and **reduced road tax**, making EVs more financially accessible.
- **Faster Permits & Registration:** EV buyers benefit from **priority registration**, **exemptions on tolls**, and easier **green permits** in several cities, enhancing the ease of ownership and daily use.

2. How do government incentives and subsidies impact the adoption rates of 2-wheelers and 4-wheelers? Which states in India provided most subsidies?

•2-Wheelers (2W):

•Government incentives make **entry-level EVs more affordable**, reducing the upfront cost gap between EVs and petrol scooters.
•State subsidies (₹5,000–₹15,000 per vehicle) significantly influence **mass-market adoption** in cities and semi-urban regions.
•Faster registration, exemption from road tax, and free charging further increase 2W EV attractiveness for daily commuters and delivery services.

4-Wheelers (4W):

•Central and state incentives (under **FAME II** and local EV policies) offer **up to ₹1.5 lakh in subsidies** on eligible 4W EV models.
•These incentives reduce total cost of ownership, which is especially important given the higher upfront cost of electric cars.
•Additional benefits like **free parking, toll waivers**, and **priority registration** boost adoption among urban, upper-middle-class consumers.

3. How does the availability of charging stations infrastructure correlate with the EV sales and penetration rates in the top 5 states?

Strong Positive Correlation:
The availability of public charging stations has shown a **direct impact on EV sales and penetration**, especially in the top-performing states. More chargers = more confidence to adopt EVs, especially 4-wheelers with longer ranges and intercity use.

State	EV Penetration	Charging Infrastructure Highlights
Delhi	High	Dense charging network in residential and commercial zones. EV policy mandates infra in new buildings.
Maharashtra	High	2,000+ public chargers. Mumbai, Pune, Nagpur are EV infra hotspots.
Karnataka	High	Bengaluru leads with robust fast-charging networks and incentives for private setups.
Tamil Nadu	Medium-High	Rapid infra rollout, especially in Chennai; major investments in manufacturing + chargers.
Gujarat	Medium-High	Focus on tier-2 cities, with state-led infra expansion in collaboration with DISCOMs.

Key Insights:
- **4W EVs are more sensitive to charging infrastructure** availability than 2W, as range anxiety is a greater concern.
- States that **proactively planned charging infrastructure** saw **faster EV adoption** and consumer confidence.
- Government-private partnerships (e.g., Tata Power, Ather Grid, Fortum) are crucial in scaling infra alongside adoption.

Conclusion:
Charging infrastructure is a **critical enabler** for EV growth. Top states demonstrate that **investment in charging stations directly supports higher EV penetration**, especially for 4-wheelers in urban and peri-urban areas.

4. Who should be the brand ambassador if AtliQ Motors launches their EV/Hybrid vehicles in India and why?

◆ Why MS Dhoni?

1.Trust + Relatability Across India:
Dhoni has immense fan following across both **urban and rural India**. His image is built on **calm leadership, reliability, and discipline**, which perfectly reflects what AtliQ Motors may want to convey—**trustworthy and future-ready mobility**.
2.Sustainable Lifestyle Advocate:
Dhoni is known for his **eco-conscious habits** and owns **electric vehicles and vintage EV-converted cars**, making him a **genuine fit** for a green brand.
3.Cross-Segment Appeal:
He resonates with **youth, middle-class families, and aspirational India**, bridging the **mass premium and affordable EV segments**—ideal for both 2W and 4W models.

◆ Why Virat Kohli?

1.Massive Pan-India Appeal:
As one of India's most recognized and trusted public figures, Virat Kohli connects with urban and youth audiences—ideal for a modern, tech-driven EV brand.
2.Sustainability Alignment:
Kohli has been publicly vocal about **fitness, minimalism, and sustainable living**, making him a credible face for an eco-conscious EV initiative.
3.Premium + Sporty Image:
His personal brand resonates with **performance, style, and responsibility**—exactly the positioning AtliQ Motors would want for its EV/Hybrid lineup.

5. Which state of India is ideal to start the manufacturing unit? (Based on subsidies provided, ease of doing business, stability in governance etc.)

Here's a summary of the ideal states for starting a manufacturing unit in India:

1. **Gujarat**: Top choice for ease of doing business, investor-friendly policies, strong infrastructure, and stable governance.
2. **Maharashtra**: Strong industrial base, good incentives, excellent infrastructure, and business-friendly policies.
3. **Tamil Nadu**: High ease of doing business, incentives for manufacturing, excellent infrastructure, and stable governance.
4. **Karnataka**: Business-friendly, offers incentives for R&D and manufacturing, strong infrastructure, and good governance.
5. **Andhra Pradesh**: Emerging as a top state with ease of doing business, good incentives, and strong governance.
6. **Uttar Pradesh**: Improving business environment, incentives for various sectors, and growing infrastructure.

These states offer a combination of subsidies, ease of doing business, and stable governance, making them favorable for setting up manufacturing units.

6. Your top 3 recommendations for AtliQ Motors.

- Launch in **Delhi, Maharashtra, and Karnataka** due to high EV penetration
- Focus initially on **4W segment** with urban charging infra support
- Partner with **state governments** for localized incentives and marketing

✅ **Conclusion (Short)**

- **EV Growth**: India's EV market is growing fast, with a total CAGR of **13.56%** from 2022–2024.
- **Top States**: Delhi, Maharashtra, and Karnataka lead in EV sales and penetration.
- **Key Drivers**: Government subsidies, fuel savings, and better charging infrastructure drive adoption.
- **Opportunity**: Huge revenue potential by 2030, especially in 2-wheeler EVs.

THANK YOU