Atliq Motors Resume Project Challenge

Presented by
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Agenda

- *STAR*
- *Preliminary Research Questions*
- *Dashboard*
- *Secondary Research Questions*

- ***Situation:***

AtliQ Motors, a major US car company, has excelled in the electric vehicle market in North America, gaining a 25% market share in the past five years. They now want to introduce their bestselling models to India, where their market share is currently under 2%.

- ***Task:***

Bruce Haryali, the head of AtliQ Motors India, needs to conduct a thorough market study of the Indian EV and hybrid vehicle sector. He assigns this task to the data analytics team.

- ***Action:***

As a data analytics team member collects and analyzes data on the Indian EV and hybrid market, including trends, customer preferences, and competitor information. I used Power BI to create a Dashboard to extract meaningful insights from the data.

- ***Result:***

Dashboard provides valuable insights that help Bruce and the team make informed decisions. This groundwork enables them to create a robust plan for launching their cars in India, aiming to boost their market share beyond the current 2%.

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.

maker	SalesFY2023_2wheeler
OLA ELECTRIC	152583
OKINAWA	96945
HERO ELECTRIC	88993
Total	338521

Top 3 makers in terms of Fiscal year 2023

maker	SalesFY2023_2wheeler
PURE EV	11556
BEING	11018
JITENDRA	8563
Total	31137

Bottom 3 makers in terms of Fiscal year 2023

maker	SalesFY2024_2wheeler
OLA ELECTRIC	322489
TVS	180743
ATHER	107552
Total	610784

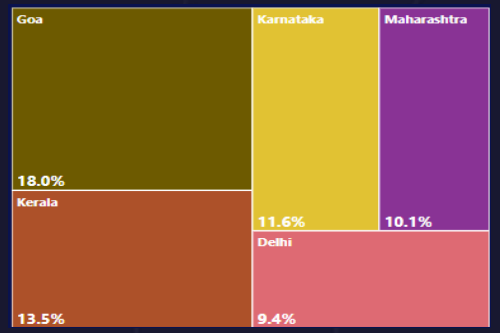
Top 3 makers in terms of Fiscal year 2024

maker	SalesFY2024_2wheeler
KINETIC GREEN	9585
REVOLT	7254
BATTRE ELECTRIC	4841
Total	21680

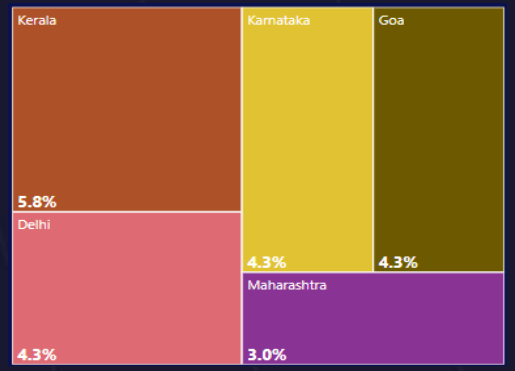
Bottom 3 makers in terms of Fiscal year 2024

*Which helps you see **who's leading the market** and **who's falling behind**. It also gives you insight into **what's trending with customers** and **where there might be opportunities or challenges in the market.***

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



These are the Top 5 states with the highest penetration rate in 2-wheelers..



These are the Top 5 states with the highest penetration rate in 4-wheelers..

*Which can highlight areas with **strong demand and potential for growth**. It also helps in **understanding regional preferences** and **market readiness for EV adoption**, which is important for planning **marketing strategies or expanding sales networks.***

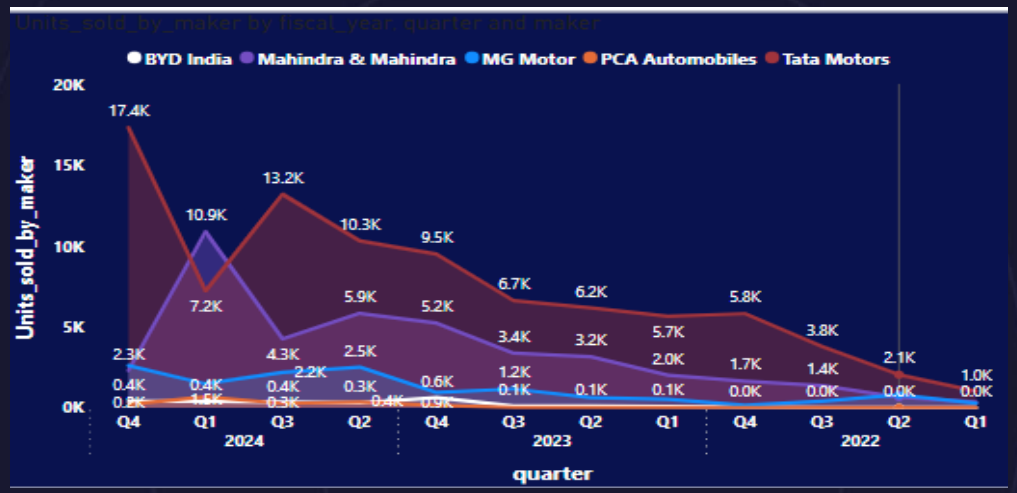
3. List the states with negative penetration (decline) in EV sales from 2022 to 2024?

state	penetration_rate	penetration rate change
Kerala	11.59%	-117.17%
Manipur	0.68%	-0.57%
Total	11.28%	-87.32%

States with negative penetration (decline) in EV sales from 2022 to 2024 are ***Kerala and Manipur.***

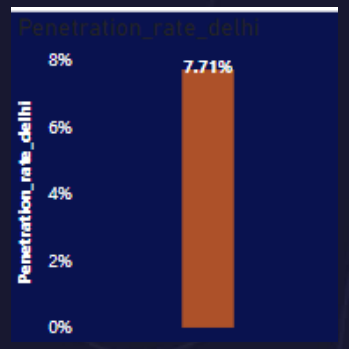
Understanding where EV adoption is declining can ***guide targeted interventions****, such as* ***adjusting marketing strategies****,* ***improving infrastructure****, or addressing specific local barriers to EV adoption.*

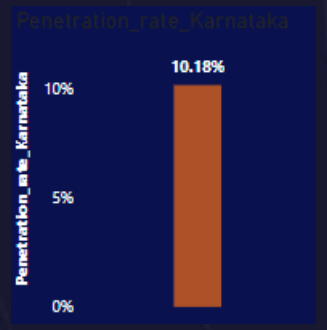
4. What are the quarterly trends based on sales volume for the top 5 EV makers (4-wheelers) from 2022 to 2024?



By analyzing the quarterly sales trends for the top 5 4-wheeler EV makers, companies can gain insights into ***consumer behavior****, assess the* ***effectiveness of their marketing campaigns****, and* ***identify the best and worst-performing quarters****. This information can guide decisions on* ***production scheduling****,* ***inventory management****, and* ***timing for introducing new models or promotions****.*

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

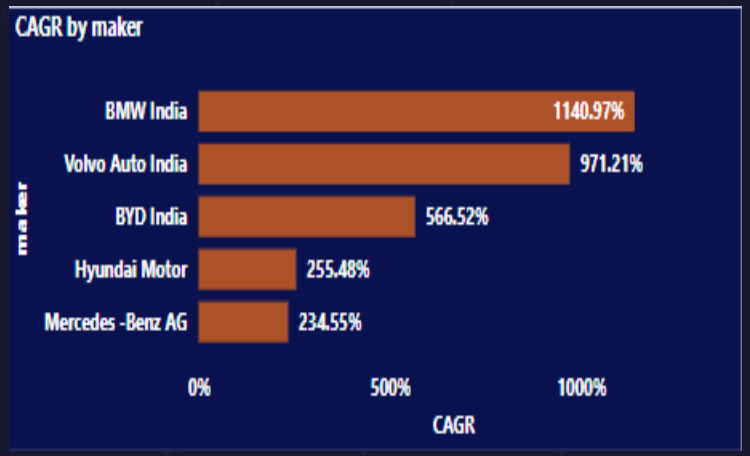




*EV sales and penetration rates in **Delhi is less (7.71%)** compared to **Karnataka(10.18%)for 2024***

*Analyzing the differences in sales and penetration rates provides insights into **regional EV market dynamics, consumer behavior, and the effectiveness of state-specific policies** or **incentives in driving EV adoption**.*

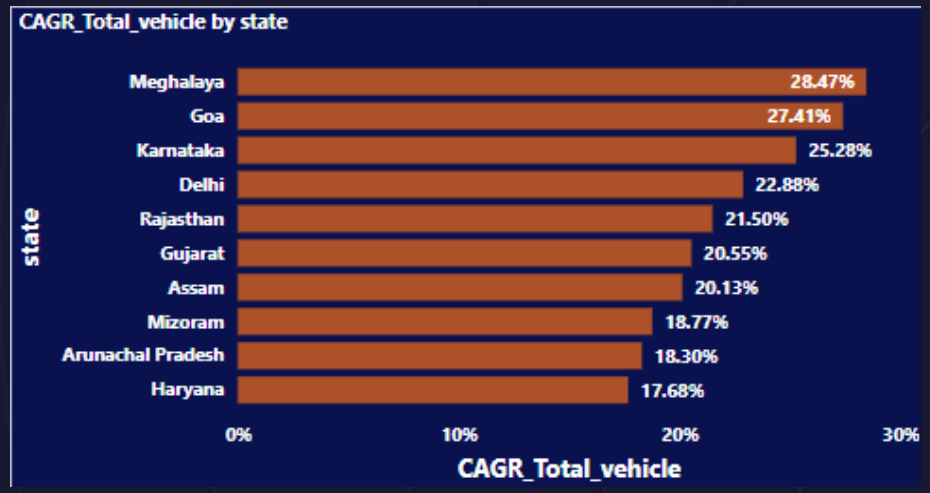
6. List down the compounded annual growth rate (CAGR) in 4-wheeler units for the top 5 makers from 2022 to 2024



Compounded annual growth rate (CAGR) in 4-wheeler units for the top 5 makers from 2022 to 2024 are ***BMW India , Volvo Auto India , BYD India , Hyundai Motor , and Mercedes –Benz AG.***

By calculating the CAGR, you can determine which makers are expanding their market share most effectively and identify trends in their sales performance. This information is useful ***for strategic planning, investment decisions, and understanding market dynamics.***

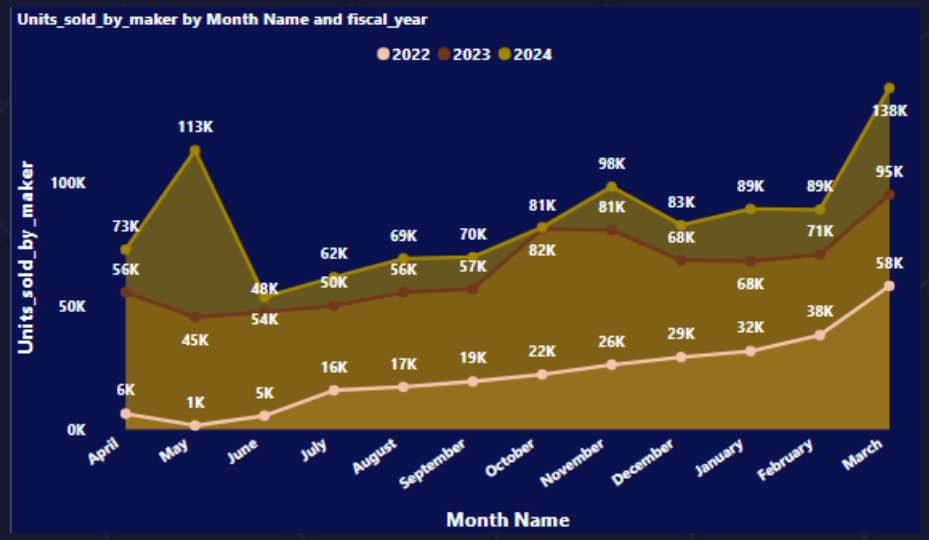
7. List down the top 10 states that had the highest compounded annual growth rate (CAGR) from 2022 to 2024 in total vehicles sold.



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

It helps in identifying the regions with the fastest-growing vehicle markets, highlighting ***areas of rapid economic development and increasing consumer demand****. Knowing which states have the highest CAGR in vehicle sales can guide* ***resource allocation, marketing strategies, and expansion plans, ensuring efforts are focused on high-growth areas****.*

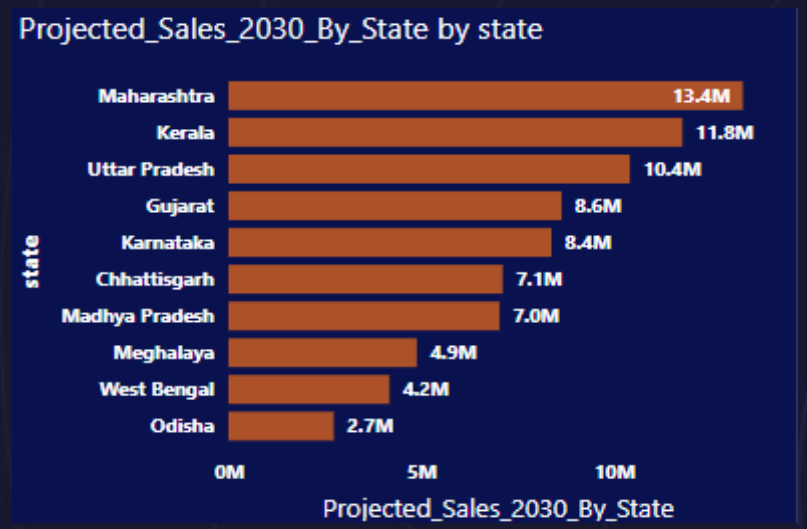
8. What are the peak and low season months for EV sales based on the data from 2022 to 2024?



***March** is the highest sales month, whereas **June** is the lowest sales month.*

*It helps in identifying the **seasonal trends in EV sales**, revealing which months typically see the **highest and lowest sales** volumes. Understanding peak and low seasons allows businesses to **optimize their inventory**, **marketing campaigns**, and **promotions** to align with **periods of high demand**, while **also planning strategies to boost sales during traditionally slower months.***

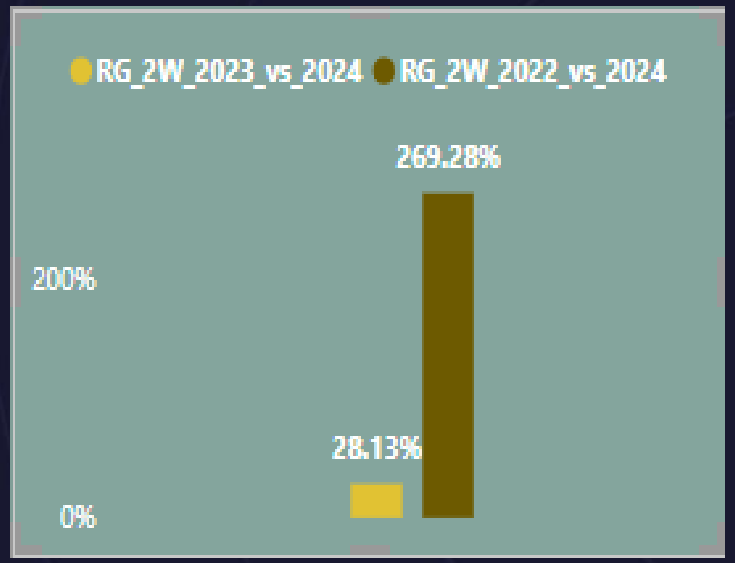
9. What is the projected number of EV sales (including 2-wheelers and 4- wheelers) for the top 10 states by penetration rate in 2030, based on the compounded annual growth rate (CAGR) from previous years?

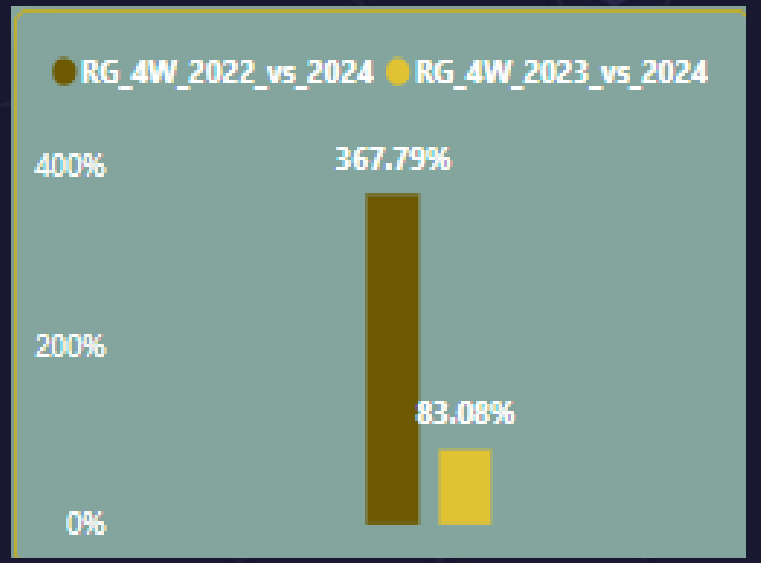


These are the top 10 states by penetration rate in 2030, based on the compounded annual growth rate (CAGR) from previous years.

It helps in estimating future market potential by projecting EV sales for 2030 in states with the highest current penetration rates. Understanding these projections allows for ***strategic planning****,* ***investment decisions****, and* ***resource allocation in the most promising markets, ensuring that efforts are focused on areas with significant growth potential.***

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.
2-Wheeler = 85,000 R/-
4-Wheeler = 15,00,000 R/-





It helps in understanding the revenue growth trends in the EV market for both 4-wheelers and 2-wheelers over specific time periods. By estimating the revenue growth rates, businesses can assess ***market performance, forecast future earnings, and make informed decisions regarding investments, pricing strategies, and resource allocation.***

Atliq Motors Electric Vehicle Dashboard

Home

Maker Level Report

State Level Report

Total Vehicle report

Atliq Motors Electric Vehicle Dashboard

Filter 0

Home

Maker Level Report

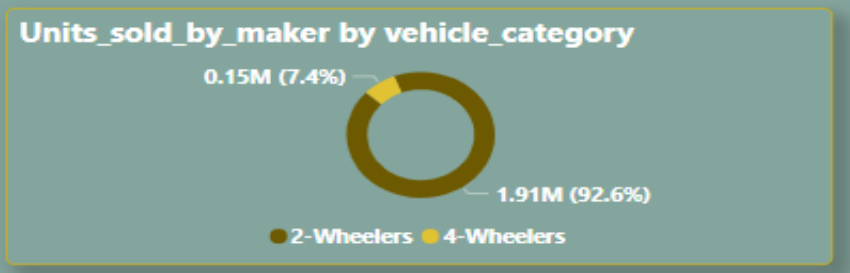
State Level Report

Total Vehicle report

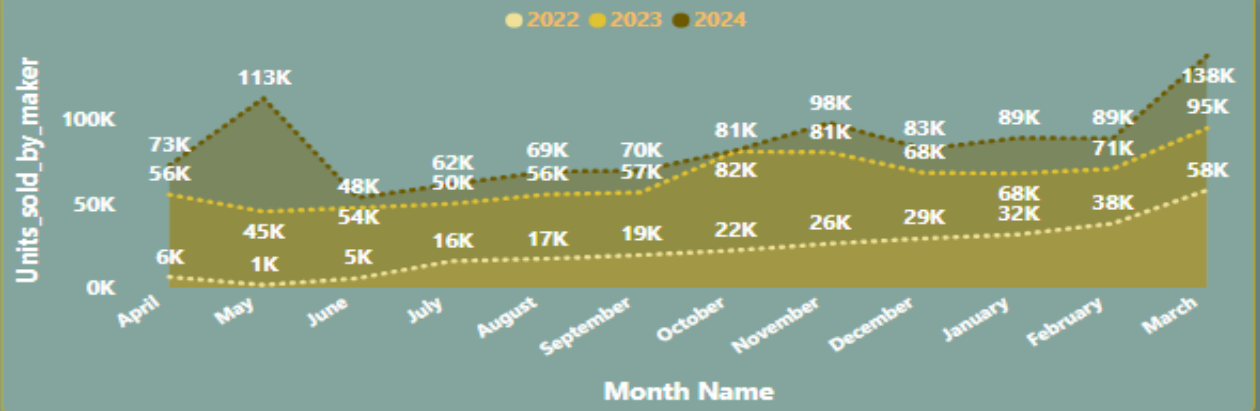
2.07M
EV_Units_Sold

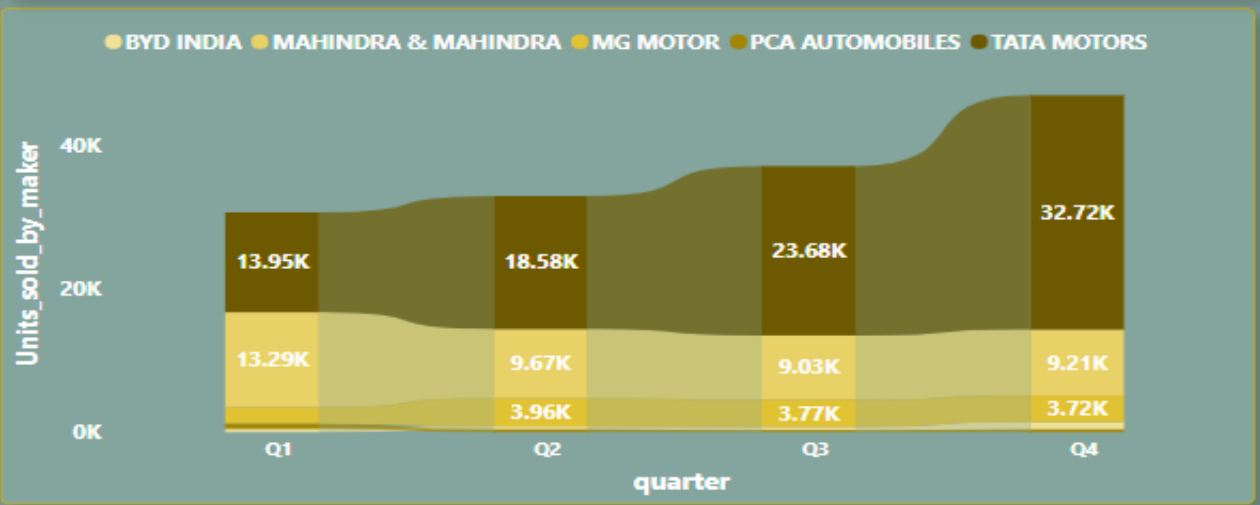
3.61%
penetration_rate

93.91%
CAGR_All



maker	Units_sold_by_maker	CAGR_All
BMW INDIA	1.4K	1140.97%
VOLVO AUTO INDIA	0.6K	971.21%
BYD INDIA	2.4K	566.52%
OLA ELECTRIC	489.5K	373.22%
TVS	272.6K	330.80%
BAJAJ	145.6K	285.45%
HYUNDAI MOTOR	2.1K	255.48%
MERCEDES -BENZ AG	0.4K	234.55%
MAHINDRA & MAHINDRA	41.2K	140.33%
ATHER	204.4K	132.04%
MG MOTOR	13.8K	131.53%
TATA MOTORS	88.9K	94.71%
OTHERS	156.5K	77.89%
AMPERE	167.3K	46.01%
BATTRE ELECTRIC	4.8K	
BGAUSS	15.1K	
KIA MOTORS	0.6K	
KINETIC GREEN	9.6K	
OKAYA EV	27.0K	
PCA AUTOMOBILES	1.7K	
REVOLT	27.8K	-2.57%
OKINAWA	165.2K	-34.23%





Atliq Motors Electric Vehicle Dashboard

Clear all slicers

Fiscal_year: 2022 | 2023 | 2024

Quarter: Q1 | Q2 | Q3 | Q4

vehicle_category: All

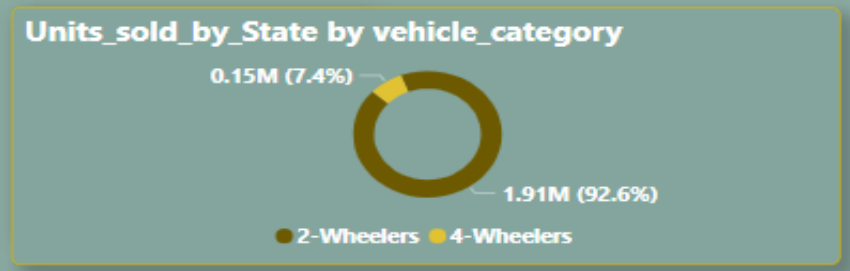
Month Name: All

state: All

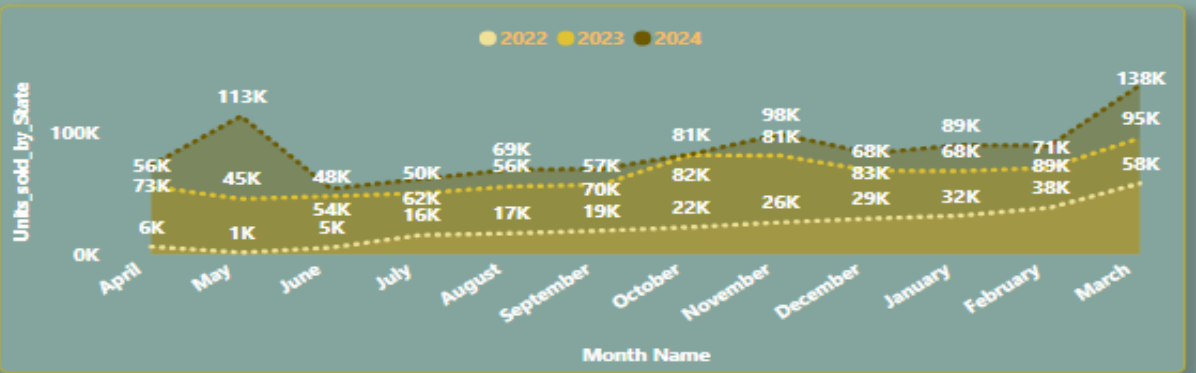
2M
Units_sold_by_State

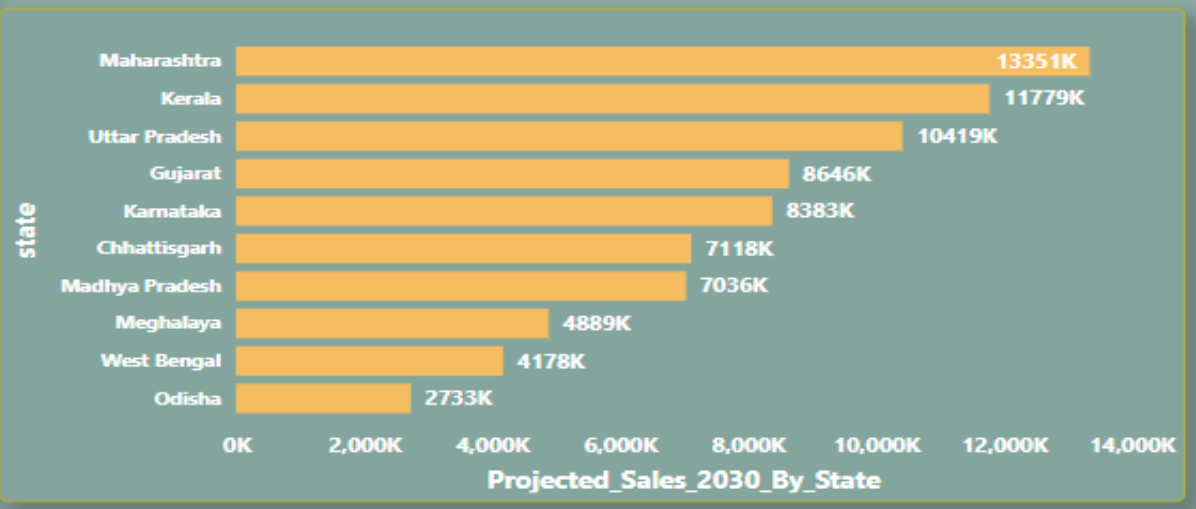
93.91%
CAGR_By_State

3.61%
penetration_rate



state	Units_sold_by_State	CAGR_By_State	penetration rate change
Kerala	137.1K	132.83%	-117.17%
Manipur	0.3K	124.50%	-0.57%
Sikkim	0.0K		0.00%
Nagaland	0.0K	200.00%	0.19%
Andaman & Nicobar	0.0K		0.30%
Arunachal Pradesh	0.0K		0.39%
Andaman & Nicobar Island	0.1K	22.47%	0.79%
Meghalaya	0.2K	476.63%	0.89%
Assam	6.4K	118.87%	1.65%
Haryana	30.8K	41.07%	2.88%
Tripura	0.6K	229.50%	3.17%
Himachal Pradesh	2.6K	53.81%	3.22%
Mizoram	0.3K		3.44%
Dnh And Dd	0.4K	137.85%	4.09%
Bihar	31.0K	76.65%	4.27%
Punjab	23.8K	57.26%	5.08%
Jharkhand	18.5K	69.89%	6.14%
Ladakh	0.1K	60.73%	6.44%
Uttarakhand	15.1K	74.57%	7.12%





CGAR - Compound Annual Growth Rate
EV - Electric Vehicle

Atliq Motors Electric Vehicle Dashboard

Home | Maker Level Report | State Level Report | Total Vehicle report

Clear all slicers

Fiscal_year: 2022 | 2023 | 2024

Quarter: Q1 | Q2 | Q3 | Q4

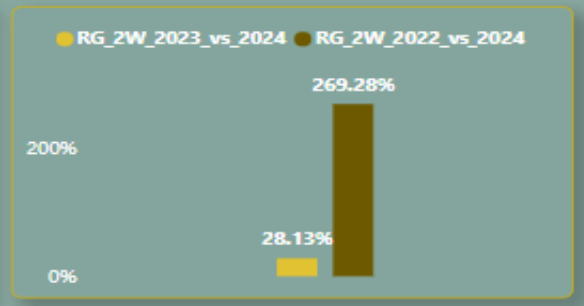
vehicle_category: All

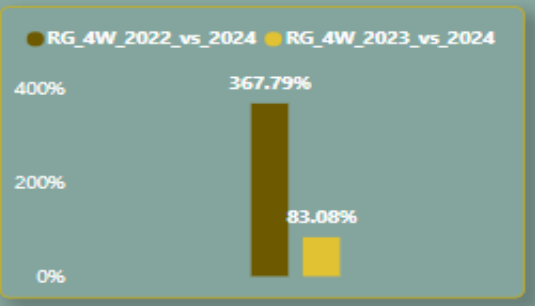
Month Name: All

state: All

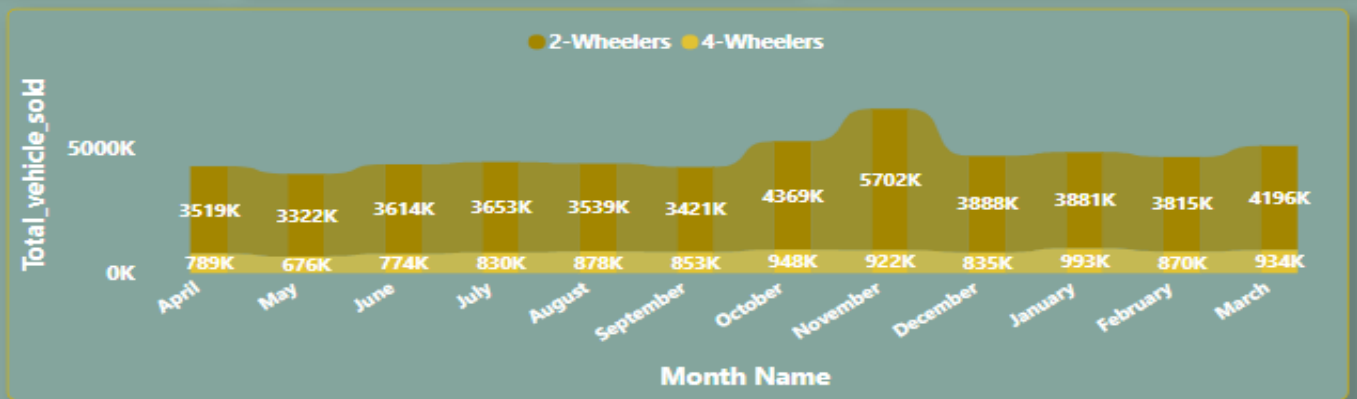
57M
Total_vehicle_sold

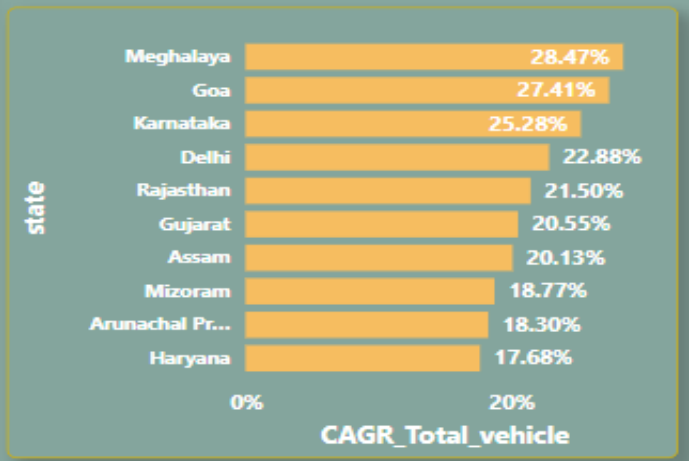
13.56%
CAGR_Total_vehicle

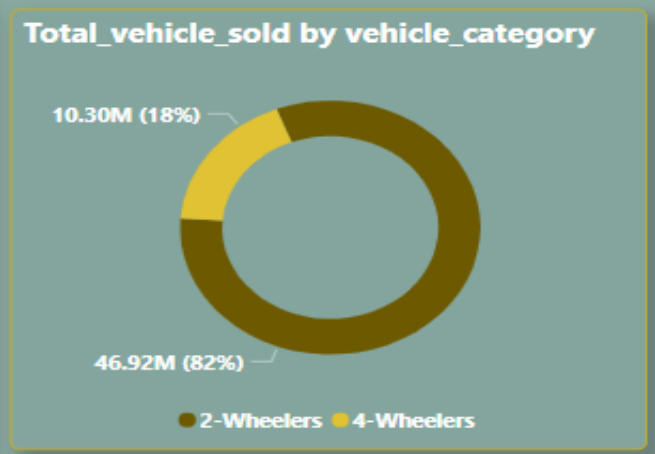




state	Total_vehicle_sold	CAGR_Total_vehicle
Manipur	105K	-28.59%
Kerala	2065K	-3.80%
Andaman & Nicobar	1K	
Andhra Pradesh	2284K	0.65%
Jammu And Kashmir	415K	2.00%
Ladakh	10K	4.94%
West Bengal	2736K	5.72%
Uttar Pradesh	8127K	8.36%
Sikkim	29K	8.73%
Himachal Pradesh	325K	9.16%
Jharkhand	1365K	9.66%
Chandigarh	131K	10.53%
Tripura	125K	10.94%
Bihar	3048K	12.63%
Andaman & Nicobar Island	18K	12.74%
Tamil Nadu	4652K	12.98%
Chhattisgarh	1335K	13.53%
Odisha	1689K	13.54%







CGAR - Compound Annual Growth Rate
EV - Electric Vehicle
RG - Revenue Growth

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)?*

Cost Savings: EVs are cheaper to run and maintain since electricity is less expensive than gas and they have fewer parts that can break down.

Environmental Concerns: People want to reduce pollution and fight climate change by driving cars that don't produce harmful emissions.

Government Incentives: Governments are giving financial perks, like discounts and tax breaks, to make buying EVs more affordable.

Better Technology: EVs now have better batteries that let them go further on a single charge, and there are more charging stations available.

More Choices: There are now many different types and models of EVs to choose from, making it easier to find one that suits different needs and budgets.

Eco-Friendly Image: Many people and companies want to be seen as environmentally friendly and responsible, and driving an EV helps with that.

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

- **Lower Purchase Costs:** Subsidies and incentives reduce the upfront cost of buying EVs, making them more affordable for consumers.
- **Increased Appeal:** Financial incentives make EVs more attractive compared to traditional vehicles, encouraging more people to consider and purchase them.
- **Faster Adoption:** By lowering the financial barrier, incentives accelerate the adoption rates as more people are able to switch to EVs sooner.
- **Market Growth:** Higher adoption rates encourage manufacturers to invest more in EV technology and infrastructure, leading to better products and more charging stations.
- **Consumer Confidence:** Government support can boost consumer confidence in the long-term viability and benefits of EVs.
- **States:** *Delhi* **,** *Maharashtra , Gujarat , Tamil Nadu , Karnataka*

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

- **Delhi**
- Delhi has increased its EV sales and adoption rates by investing in a comprehensive network of **over 500 charging points across the city, enhancing consumer confidence in using electric vehicles.**

- **Maharashtra**
- Maharashtra is actively expanding its charging network in major cities **like Mumbai and Pune**, which has facilitated higher EV sales and made the state a leader in EV adoption.

- **Gujarat**
- Gujarat has focused on widespread charging infrastructure **across urban and rural areas**, leading to significant growth in EV sales and positioning it as a top state for EV adoption.

- **Tamil Nadu**
- Tamil Nadu has set up extensive charging stations in **urban centers and along major highways,** resulting in increased EV sales and penetration rates, further strengthened by the state's role as an EV manufacturing hub.

- **Karnataka**
- Karnataka has invested heavily in charging infrastructure, particularly in **Bengaluru and other major cities**, contributing to higher EV adoption rates supported by favorable policies and incentives.

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

Movie Actors
Sports persons

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

Tamil Nadu stands out as an ideal state for setting up an EV manufacturing unit.

While other states like Maharashtra, Gujarat, Karnataka, and Delhi also offer significant benefits and have their own strengths, Tamil Nadu's combination of **robust infrastructure**, **business-friendly policies**, **stable governance**, and a **strong talent pool** makes it **an ideal choice for setting up an EV manufacturing unit.**

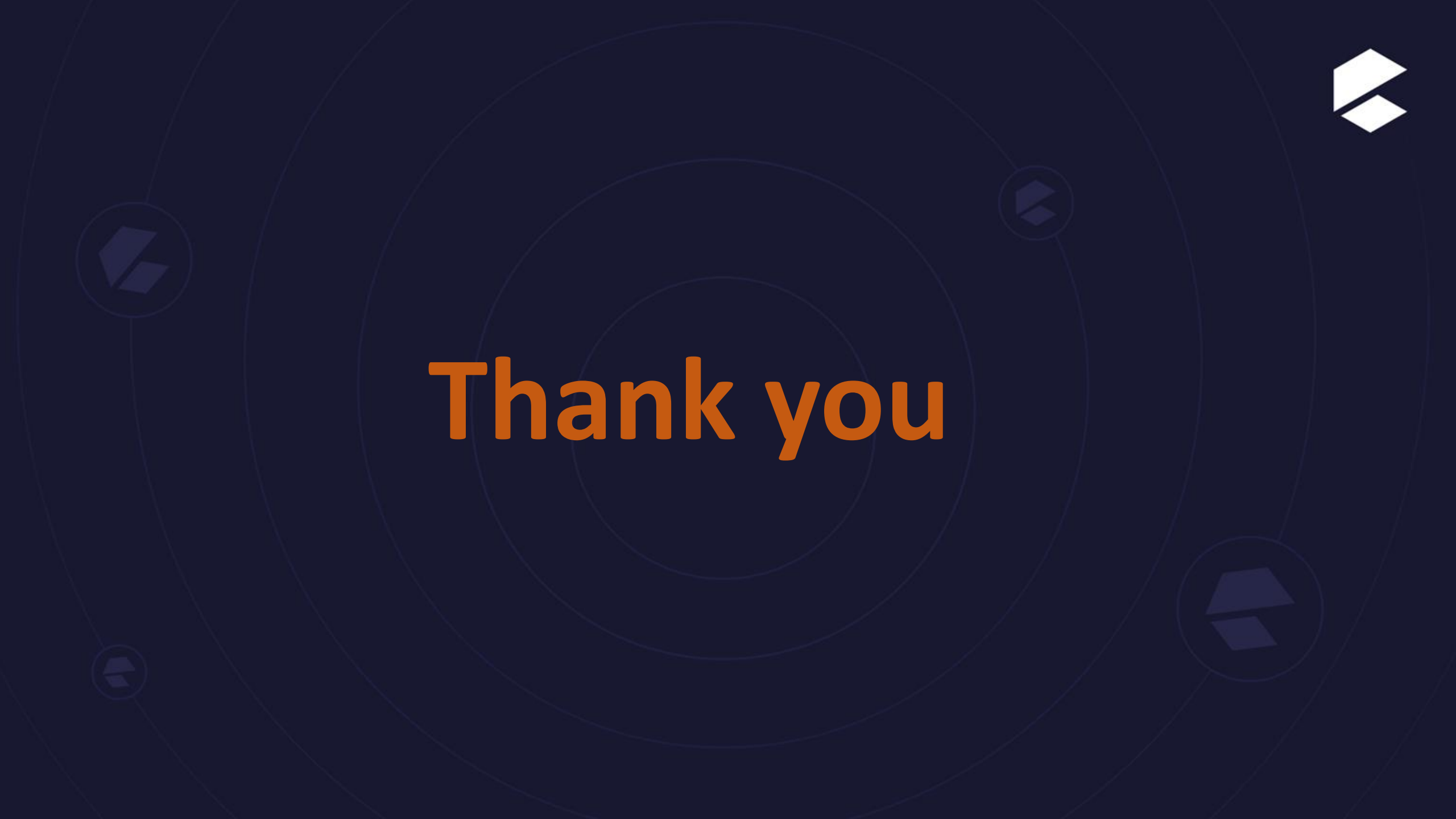
Considering subsidies, **ease of doing business**, **stability in governance**, **infrastructure**, and **market potential**, **Tamil Nadu emerges as the top state in India** to start an EV manufacturing unit.

6. Your top 3 recommendations for AtliQ Motors.

- ***Choose Tamil Nadu for Manufacturing Base.***
- *Subsidies and Incentives*
- *Ease of Doing Business*
- *Established Automotive Hub*

- ***Focus on Comprehensive Product Range and Quality.***
- *Market Diversification*
- *Quality Assurance*
- *Innovation*

- ***Develop Robust Charging Infrastructure and Partnerships.***
- Infrastructure Investment
- Strategic Partnerships
- Government Collaboration


Thank you