

# 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. Lower Running Costs:

- **Fuel Savings:** This is a *huge* motivator, especially with fluctuating and generally high petrol and diesel prices. EVs offer significantly lower "fuel" costs, making them attractive for daily commutes and frequent driving.
- **Reduced Maintenance:** EVs have fewer moving parts than combustion engines, leading to lower maintenance costs over the vehicle's lifetime. This appeals to those seeking long-term savings.

### 2. Environmental Concerns:

- **Growing Awareness:** There's increasing awareness of air pollution and climate change in India. Buyers, particularly in urban areas, are actively seeking ways to reduce their carbon footprint.
- **Status Symbol:** EVs are becoming a status symbol associated with environmental consciousness and progressive thinking.

### 3. Government Incentives:

- **Impact Varies:** While government subsidies (like those under FAME II) help, they're often not the *primary* driver. High initial EV costs still pose a barrier for many, even with subsidies.
- **State-Specific Influence:** The impact of incentives is more significant in states with generous subsidies and well-developed charging infrastructure (e.g., Gujarat, Maharashtra).

### 4. Technology and Features:

- **Performance:** Many modern EVs offer impressive acceleration and a smooth, quiet driving experience, which is appealing to tech-savvy buyers.
- **Advanced Features:** Features like large touchscreens, connected car technology, and advanced driver-assistance systems (ADAS) are attracting customers looking for a premium experience.

### 5. Future-Proofing:

- **Charging Infrastructure:** While still developing, the charging infrastructure is expanding rapidly, making EVs more practical for daily use.
- **Long-Term Vision:** Buyers see EVs as a future-proof investment, anticipating further advancements in technology, battery range, and charging infrastructure.

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

### Impact of Incentives and Subsidies:

- **Reduced Upfront Costs:** Subsidies directly lower the purchase price of vehicles, making them more affordable for consumers. This is particularly crucial in the EV market, where the initial cost of EVs is often higher than traditional petrol vehicles.
- **Increased Affordability:** By making EVs more price-competitive, subsidies encourage buyers to consider them as a viable alternative to conventional vehicles.
- **Market Growth:** Incentives attract new players to the EV market, boosting both production and competition. This leads to greater innovation and a wider range of choices for consumers.
- **Environmental Benefits:** Government support for EVs promotes a shift towards cleaner transportation, reducing carbon emissions and improving air quality.
- **Economic Growth:** Subsidies can stimulate the local EV manufacturing industry, creating jobs and boosting the economy.

### States with the Most Subsidies:

Several states in India have implemented robust EV subsidy policies. Some of the most notable ones include:

- **Gujarat:** Offers one of the highest EV subsidies in India, with up to ₹20,000 for electric two-wheelers, ₹50,000 for electric three-wheelers, and ₹1.5 lakh for electric cars.
- **Maharashtra:** Provides subsidies of up to ₹10,000 for electric two-wheelers and ₹1 lakh for electric cars.
- **Delhi:** Offers a subsidy of up to ₹30,000 for electric two-wheelers and ₹1.5 lakh for electric cars.

- **Assam:** Provides a flat subsidy for all new electric 2W, 3W, and 4W vehicles.
- **Odisha:** Offers subsidies calculated as a percentage of the vehicle's cost.

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

You're hitting on a crucial point! The availability of charging infrastructure is definitely a key factor influencing EV adoption. Here's how it correlates with EV sales and penetration in the top 5 states:

#### 1. Maharashtra:

- **High EV Sales & Penetration:** Maharashtra boasts the highest EV sales and a strong penetration rate.
- **Extensive Charging Network:** It also has the most extensive charging infrastructure among the top 5 states.
- **Correlation:** This suggests a strong positive correlation. The wide availability of chargers likely reduces range anxiety and makes EVs more practical for daily use, contributing to higher sales.

#### 2. Karnataka:

- **High EV Sales & Penetration:** Karnataka shows impressive EV adoption despite having fewer charging stations compared to Maharashtra.
- **Other Factors at Play:** This indicates that other factors like strong government incentives, growing environmental awareness, and the availability of popular EV models are driving demand.
- **Infrastructure Still Important:** However, expanding charging infrastructure is crucial to sustain this growth and encourage wider EV adoption in the long term.

#### 3. Tamil Nadu:

- **Moderate Sales & Penetration:** Tamil Nadu has moderate EV sales and penetration with a relatively lower number of charging stations.
- **Room for Improvement:** Increasing the density and accessibility of charging stations, especially fast chargers, could significantly boost EV adoption in the state.

#### 4. Gujarat:

- **Moderate Sales & Penetration:** Gujarat has moderate EV sales and penetration but the lowest number of charging stations per EV among the top 5.
- **Potential Bottleneck:** This suggests that limited charging infrastructure might be a limiting factor hindering faster EV adoption. Expanding the network is crucial to realize the full potential of Gujarat's EV market.

#### 5. Kerala:

- **High Penetration, Lower Sales:** Kerala presents an interesting case with the highest penetration rate but the lowest absolute sales among the top 5.
- **Charging Infrastructure a Key Enabler:** A decent number of charging stations per 10,000 EVs suggests that the availability of charging infrastructure is likely contributing to the high penetration rate, overcoming the challenge of lower overall sales.

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

#### 1. For Mass Appeal and Youth Focus:

- **Ranveer Singh:** His energetic personality, wide appeal across demographics, and association with style and performance align well with EVs as modern and exciting. He can connect with younger audiences and position AtliQ as a trendy and aspirational brand.

#### 2. For Trust and Reliability:

- **Akshay Kumar:** Known for his disciplined lifestyle and association with action and adventure, he can project AtliQ's EVs as reliable and performance-driven. His wide reach and patriotic image can further strengthen the brand's connection with Indian consumers.

#### 3. For Eco-Consciousness and Sophistication:

- **Alia Bhatt:** Her image as a talented and environmentally conscious actress can resonate with buyers who prioritize sustainability and style. She can position AtliQ as a premium brand with a strong commitment to the environment.

#### 4. For Tech-Savviness and Innovation:

- **Shah Rukh Khan:** His association with technology and innovation, along with his massive fan following, can help AtliQ attract tech-savvy consumers and establish itself as a leader in the EV space.

#### 5. For a Regional Focus (South India):

- **Mahesh Babu or Allu Arjun:** These superstars have immense popularity in South India, a key market for EVs. Their endorsement can significantly boost AtliQ's visibility and appeal in the region.

#### Factors to Consider When Choosing:

- **Target Audience:** Who is AtliQ primarily trying to reach? (e.g., young urban professionals, families, tech enthusiasts)
- **Brand Image:** What image does AtliQ want to project? (e.g., innovative, reliable, stylish, eco-conscious)
- **Ambassador's Values:** Do the ambassador's values align with AtliQ's brand values?
- **Reach and Influence:** Does the ambassador have a strong reach and influence among the target audience?
- **Cost and Availability:** Is the ambassador within AtliQ's budget and available for collaborations?

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

This is a critical decision for AtliQ Motors! Here's a breakdown of some of the top contenders for an EV manufacturing unit in India, considering your criteria:

##### 1. Gujarat:

- **Strong Subsidies:** Gujarat offers some of the most generous EV subsidies in India, making it financially attractive for manufacturers.
- **Ease of Doing Business:** Gujarat consistently ranks high in ease of doing business rankings due to streamlined regulations and efficient processes.
- **Stable Governance:** The state has a history of stable governance and pro-business policies.
- **Infrastructure:** Gujarat boasts good infrastructure, including ports, roads, and power supply, which is essential for manufacturing operations.
- **Land Availability:** The state has dedicated industrial zones with readily available land for setting up manufacturing units.

##### 2. Maharashtra:

- **Large Market:** Maharashtra has the highest EV sales in India, providing a ready market for AtliQ's vehicles.
- **Skilled Workforce:** Access to a large pool of skilled labour is a major advantage for manufacturing.
- **Established Ecosystem:** Maharashtra has a well-established automotive ecosystem with existing component suppliers and infrastructure.
- **Government Support:** The state government is proactive in promoting the EV industry and offers various incentives.

##### 3. Tamil Nadu:

- **Automotive Hub:** Tamil Nadu is a major automotive manufacturing hub with a strong presence of global carmakers.
- **Supportive Policies:** The state government has favourable policies for the EV industry and is actively promoting its growth.
- **Infrastructure:** Good infrastructure and connectivity are essential for manufacturing and logistics.
- **Talent Pool:** Tamil Nadu has a skilled workforce and a strong educational ecosystem.

##### 4. Karnataka:

- **Growing EV Market:** Karnataka is witnessing rapid growth in EV adoption and has a supportive policy environment.
- **Technology Hub:** Being a technology hub, Karnataka offers access to skilled engineers and a thriving innovation ecosystem.
- **Ease of Doing Business:** Karnataka has made significant strides in improving ease of doing business and attracting investments.

#### Factors to Consider for AtliQ:

- **Specific Needs:** AtliQ needs to assess its specific requirements for land, labor, infrastructure, and supply chain.
- **Target Market:** The location should align with AtliQ's target market and distribution strategy.

- **Long-Term Vision:** Consider the state's long-term commitment to the EV industry and its potential for future growth.
- **Incentive Packages:** Evaluate the comprehensive incentive packages offered by different states, including tax breaks, subsidies, and infrastructure support.

## 6. Your top 3 recommendations for AtliQ Motors.

Given my analysis of the Indian EV market, here are my top 3 recommendations for AtliQ Motors to ensure a successful launch and sustained growth:

### 1. Establish Manufacturing in Gujarat:

- **Why:** Gujarat offers the best overall package:
  - **Financial Incentives:** Generous subsidies and tax benefits under the Gujarat EV Policy.
  - **Ease of Doing Business:** Streamlined processes and efficient bureaucracy.
  - **Stable Governance:** Pro-business environment and consistent policies.
  - **Infrastructure:** Well-developed industrial zones, ports, and logistics networks.
- **Action:**
  - **Build a Cost-Efficient Plant:** Leverage Gujarat's capital subsidies and incentives to establish a state-of-the-art manufacturing facility.
  - **Develop Local Supply Chain:** Collaborate with local suppliers to reduce costs and improve efficiency.

### 2. Target Urban and Youth-Centric Markets with Ranveer Singh as Brand Ambassador:

- **Why:**
  - **Mass Appeal:** Ranveer Singh has a massive following across India and resonates with young, urban consumers – a key demographic for EVs.
  - **Brand Alignment:** His energetic and stylish personality aligns with the image of EVs as modern, exciting, and aspirational.
  - **Influence:** He can effectively promote AtliQ's EVs through social media and traditional marketing campaigns.
- **Action:**
  - **Launch a Youth-Focused Campaign:** Develop a marketing strategy that highlights the technology, performance, and style of AtliQ EVs, featuring Ranveer Singh.
  - **Engage on Social Media:** Leverage Ranveer's strong social media presence to connect with young audiences and build brand awareness.

### 3. Focus on Expanding Charging Infrastructure Partnerships:

- **Why:**
  - **Range Anxiety:** A major barrier to EV adoption is the fear of running out of charge.
  - **Convenience is Key:** A robust and accessible charging network is crucial for making EVs practical for daily use.
- **Action:**
  - **Strategic Partnerships:** Collaborate with government agencies, private charging providers, and real estate developers to expand the charging network.
  - **Focus on Key Locations:** Prioritize installing chargers in urban areas, residential complexes, workplaces, and along highways.
  - **Fast Charging Options:** Ensure the availability of fast chargers to reduce charging time and improve the overall EV ownership experience.