

EV Adoption Growth in India (2020–2024)

Portfolio Project Report

By Rishant Singh

This report provides a detailed, visual, and analytical overview of India's Electric Vehicle adoption growth using official registration data from the VAHAN Portal. The project includes data cleaning, growth calculations, dashboard design, and impactful insights.

1. Project Overview

India is experiencing rapid growth in Electric Vehicle (EV) adoption driven by government policies, rising fuel costs, and technological advancements. This project examines EV registration data over a 5-year period to highlight national and state-level adoption patterns.

2. Dataset Summary

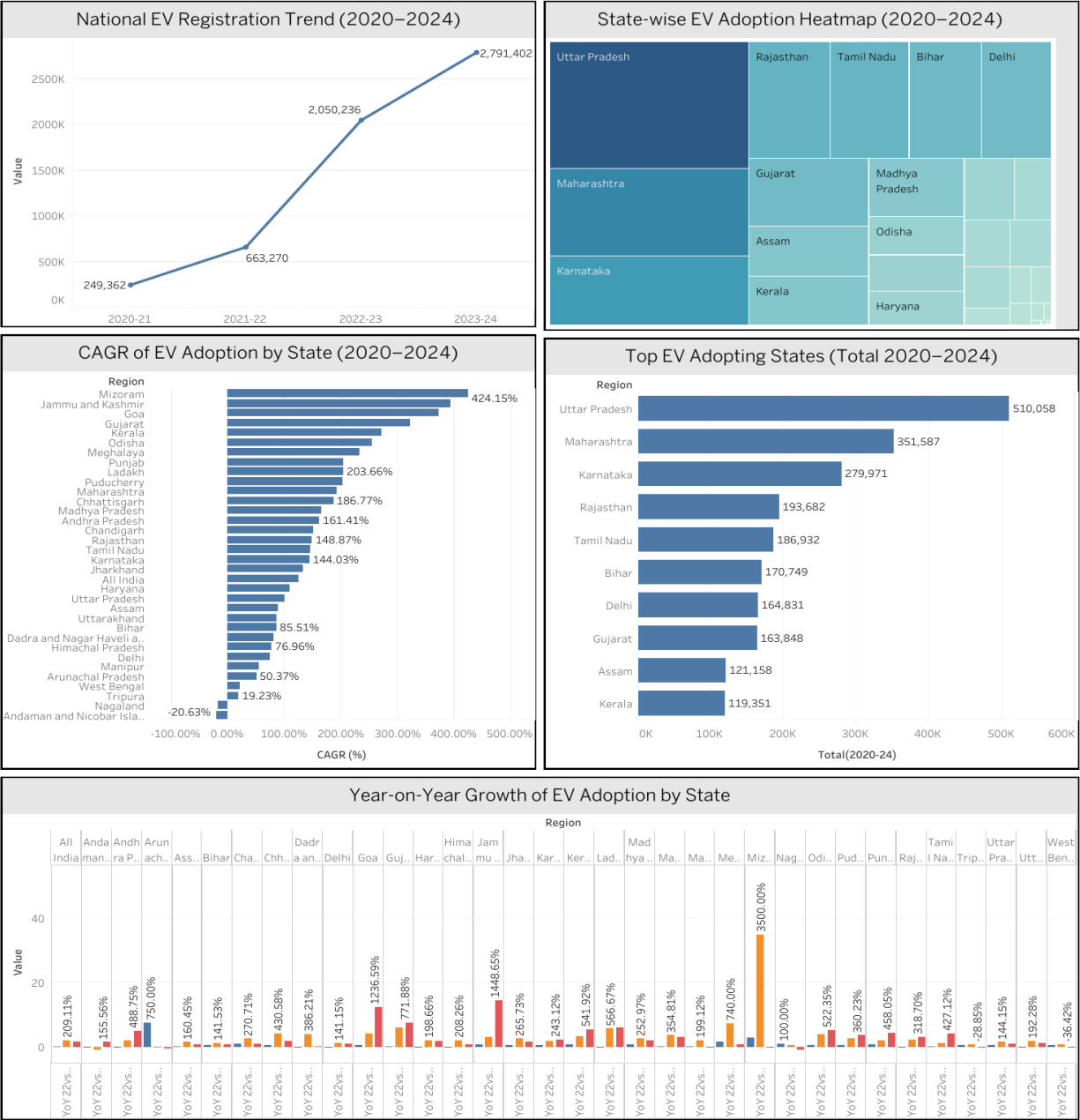
- Source: VAHAN Portal (Government of India)
- Years Covered: 2020–21 to 2023–24
- Fields Included: State/UT, EV registrations, YoY growth %, CAGR, totals
- Additional Fields Created: YoY growth %, CAGR, Total EVs, All India totals

3. Dashboard Preview

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Source: VAHAN Portal (Govt of India) | Created by: Rishant Singh

- ✓ India's EV adoption surged more than 10× between 2020–21 and 2023–24.
- ✓ Uttar Pradesh, Maharashtra, Karnataka, and Tamil Nadu are the top EV-adopting states.
- ✓ Northeastern states show high % growth despite lower volumes.
- ✓ National CAGR is extremely strong, indicating accelerating EV penetration.



4. Key Insights

- India's EV registrations increased nearly 10x between 2020 and 2024.
- Uttar Pradesh, Maharashtra, Karnataka, and Tamil Nadu are top EV adopters.
- Northeastern states show very high percentage growth.
- National CAGR is extremely strong, indicating accelerating EV penetration.
- EV adoption is spreading consistently across large and small states.

5. What This Project Demonstrates

- Ability to clean and transform real-world public datasets.
- Skill in calculating YoY growth %, CAGR, and totals.
- Ability to design multi-chart interactive dashboards in Tableau.
- Skill in storytelling using data visuals.
- Understanding state-level EV growth patterns in India.

6. Conclusion

India is entering a high-growth EV adoption phase. Major states continue to lead EV adoption, while smaller and northeastern states show promising percentage growth. With the help of Excel and Tableau, this project converts raw government data into clear, actionable insights.

Dashboard Link:

https://public.tableau.com/app/profile/rishant.singh/viz/ev_growth_rate_india/Dashboard1

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