

PROJECT ABSTRACT

Electric Vehicle Charge and Range Analysis

The Electric Vehicle (EV) Charge and Range Analysis project focuses on analyzing EV charging infrastructure, brand distribution, performance metrics, efficiency levels, and pricing trends in India. With the rapid growth of the electric vehicle market, understanding infrastructure availability and vehicle performance has become essential.

This project uses data visualization techniques to explore EV charging station distribution across different regions in India, compare global and Indian EV brands, analyze vehicle efficiency and top speed, and evaluate price segmentation among various EV models.

The dashboard was developed using Tableau, while data preprocessing and cleaning were performed using Microsoft Excel. Geographic visualization was implemented using OpenStreetMap integration.

Key insights derived from the analysis include:

- India currently has 12 active EV brands compared to 32 globally.
- NDMC region has the highest concentration of charging stations.
- Luxury EV brands such as Porsche and Audi dominate in performance metrics.
- Tata and MG provide affordable EV options in India.
- Efficiency levels vary significantly across brands.

This project provides a comprehensive analytical overview of the EV ecosystem in India and supports data-driven insights for understanding infrastructure growth and market trends.