

EV Sales Insights by Maker in India

Project Description: This Power BI dashboard provides a comprehensive analysis of electric vehicle (EV) sales across India, focusing on manufacturers (makers) and vehicle categories (2-Wheelers and 4-Wheelers). It uses monthly sales data to uncover market trends, identify top-performing EV makers, and track adoption patterns over time.

Key insights include:

- Sales performance by EV maker
- Category-wise distribution (2W vs 4W)
- Monthly and yearly sales trends
- Maker-wise growth patterns
- Market dominance in segments

PowerBI Dashboard



Dataset Overview

This project uses three CSV files containing monthly electric vehicle (EV) sales data across India, broken down by state, manufacturer, and date. Below is a description of each file and its structure.

1. electric_vehicle_sales_by_state.csv

Contains state-wise monthly sales data for electric and total vehicles, broken down by category.

Columns:

- date: The date of the record (e.g., 01-Apr-21)
- state: Name of the state (e.g., Sikkim)
- vehicle_category: Category of the vehicle (2-Wheelers or 4-Wheelers)
- electric_vehicles_sold: Number of EVs sold in that category/state/month
- total_vehicles_sold: Total number of vehicles sold (electric + non-electric)

2. electric_vehicle_sales_by_makers.csv

Contains EV sales data by vehicle **maker (brand)** and category over time.

Columns:

- date: The date of the record (e.g., 01-May-21)

- vehicle_category: 2-Wheelers or 4-Wheelers
- maker: Manufacturer or brand (e.g., OLA ELECTRIC, OKAYA EV)
- electric_vehicles_sold: Number of EVs sold by that maker in that category/month

3. dim_date.csv

A date dimension table useful for time-series analysis.

Columns:

- date: The date entry (e.g., 01-May-21)
- fiscal_year: Indian fiscal year (e.g., 2022)
- quarter: Fiscal quarter (Q1, Q2, etc.)

Strategic Analysis Objectives

- 1. Which EV maker has sold the most vehicles overall?**
- 2. How have EV sales changed over time (monthly or yearly)?**
- 3. Which vehicle category (2-Wheeler or 4-Wheeler) has higher EV sales?**
- 4. What is the sales trend for a specific EV maker (e.g., Ola Electric)?**
- 5. Who are the top 5 EV makers by total sales?**
- 6. What were the EV sales in a specific month or year?**
- 7. Which EV maker dominates the 2-Wheeler or 4-Wheeler segment?**



List of Visualization Tools Used in the Dashboard

Visualization Type	Purpose / Significance
KPI Cards	Display key summary metrics: Total Vehicles (57M), EV Sold (2M), and Penetration (3.61%)
Bar Charts (Top/Bottom Makers)	Show comparison of EV sales among top and bottom 8 manufacturers
Line Chart (Total Sales Trend)	Track monthly trend of Total vs Electric Vehicle sales over time
Map Visualization	Geographical distribution of EV sales across Indian states
Line Chart by Quarter & State	Compare EV sales across major states by quarter, showing trends geographically
Area/Line Charts (Penetration by State)	Identify states with highest and lowest EV penetration
Slicers (Year, Category)	Allow filtering data by fiscal year (2022–2024) and vehicle category (2W/4W)