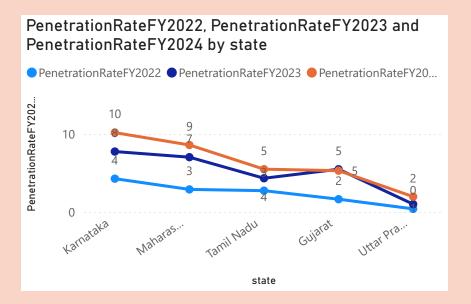


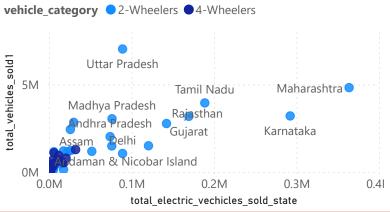
tevsm=total_electric_vehicles_sold_makers

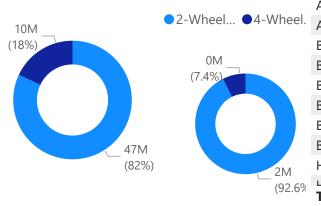
Top 5 states by tvs



state	tevs	tvs	Penetration Rate%
Andaman & Nicobar Island	80	18885	0.42
Andhra Pradesh	77422	2283871	3.39
Arunachal Pradesh	33	71547	0.05
Assam	6418	1403271	0.46
Bihar	31019	3048373	1.02
Chandigarh	5279	130628	4.04
Chhattisgarh	53804	1334989	4.03
Delhi	107312	1588436	6.76
DNH and DD	355	43397	0.82
Goa	19684	199970	9.84
Gujarat	181389	4125551	4.40
Haryana	30797	1902768	1.62
Himachal Pradesh	2595	325366	0.80

total_electric_vechicles_sold_state and tvs by vehicle_category total_vehicles_sold1 by state and vehicle_category

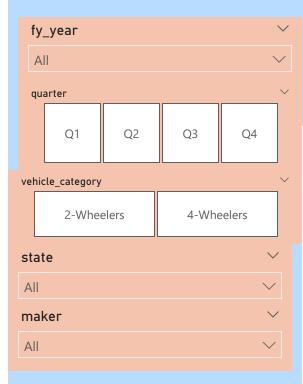




tevs by

vehicle_category

maker	tevsm
AMPERE	1672
ATHER	2044
BAJAJ	1456
BATTRE ELECTRIC	48
BEING	183
BGAUSS	150
BMW India	13
BYD India	24
HERO ELECTRIC	1703
Total	20661



269.28%

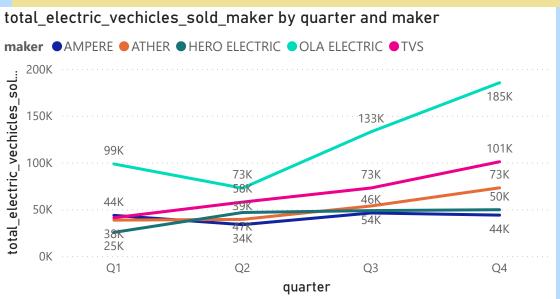
367.79% 28.13% 83.08%

Growth Rate 2022-2024 2W

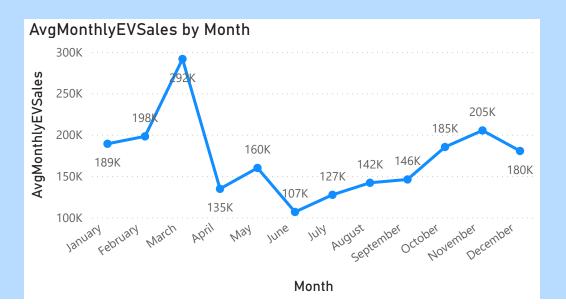
Growth Rate 2022-2024 4W

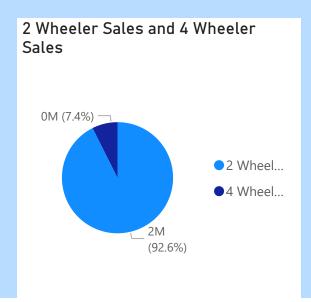
Growth Rate 2023 2024 2W

Growth Rate 2023-2024 4W



state	CAGR22_24 EV	CAGR Total vehicle
Andaman & Nicobar Island	26.13%	18
Andhra Pradesh	54.35%	C
Arunachal Pradesh	-100.00%	18
Assam	118.87%	20
Bihar	76.65%	12
Chandigarh	164.58%	10
Chhattisgarh	150.89%	13
Delhi	68.10%	22
DNH and DD	137.85%	14
Goa	146.45%	27
Gujarat	116.33%	20
Total	93.91%	13





fy_desc, fiscal_year	V			
∨ □ 2022	quarter			
∨ □ 2023	Q1	Q2	Q3	Q4
✓ □ 2024 Est				

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.

Top 3 makers

maker	Total Electric Vehicles Sold
Mahindra & Mahindra	41193
OLA ELECTRIC	489473
Tata Motors	88935
Total	619601

vehicle_category 2-Wheelers 4-Wheelers

Bottom 3 makers

Total	14814
Mercedes -Benz AG	388
KINETIC GREEN	9585
BATTRE ELECTRIC	4841
maker	Total Electric Vehicles Sold



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

state	Penetration Rate%
Goa	9.84
Karnataka	7.84
Delhi	6.76
Kerala	6.64
Maharashtra	6.49
Total	6.98

15.74%

PenetrationRate22vs24_Change%

748K change_EV_sales22vs24

5M change_total_sales22vs24

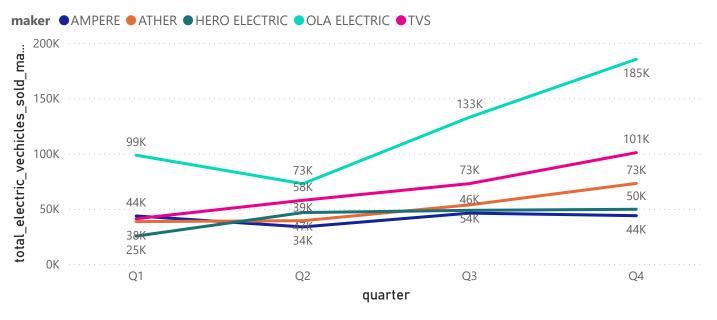
3. List the states with negative penetration (decline) in EV sales from 2022 to 2024?

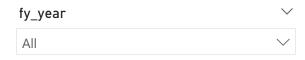
state	PenetrationRate22vs24_Change%
Kerala	-117.17%
Manipur	-0.57%
Sikkim	0.00%
Nagaland	0.19%
Arunachal Pradesh	0.39%
Andaman & Nicobar Island	0.63%
Meghalaya	0.89%
Assam	1.65%
Haryana	2.88%
Tripura	3.17%
Himachal Pradesh	3.22%
Mizoram	3.44%
DNH and DD	4.09%
Bihar	4.27%
Punjab	5.08%
Jharkhand	6.14%
Ladakh	6.44%
Littorakhand	7 120/
Total	15.74%



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

total_electric_vechicles_sold_maker by quarter and maker





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

state	electric_vehicles_sold1	Penetration Rate%
Delhi	107312	6.76
Karnataka	312995	7.84



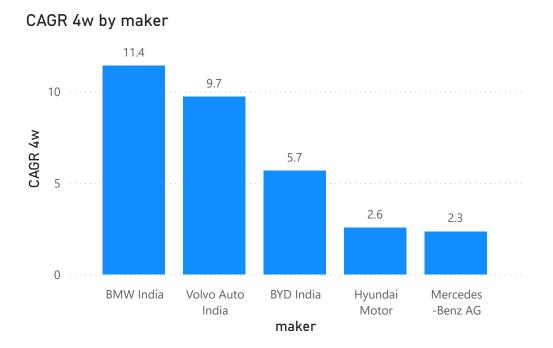
vehicle_category

2-Wheelers

4-Wheelers

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

maker	CAGR 4w ▼
BMW India	11.41
Volvo Auto India	9.71
BYD India	5.67
Hyundai Motor	2.55
Mercedes -Benz AG	2.35
Total	4.10





vehicle_category

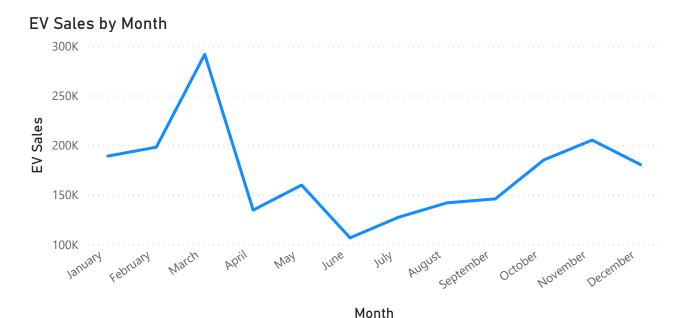
2-Wheelers

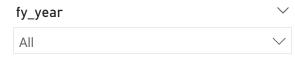
4-Wheelers

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

CAGR Total vehicle sales state 28.47% Meghalaya Goa 27.41% Karnataka 25.28% Delhi 22.88% Rajasthan 21.50% Gujarat 20.55% 20.13% Assam Mizoram 18.77% Arunachal Pradesh 18.30% Andaman & Nicobar Island 18.29% **Total** 22.32%

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





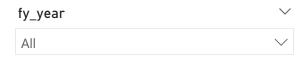
9. What is the projected number of EV sales (including 2-wheelers and 4-wheelers) for the top 10 states by penetration rate in 2030, based on the compounded annual growth rate (CAGR) from previous years?

state	Projected Sales by 2030 in Millions
Chandigarh	0.99M
Chhattisgarh	7.12M
Delhi	1.05M
Goa	2.42M
Karnataka	8.38M
Kerala	11.78M
Maharashtra	13.35M
Odisha	2.73M
Puducherry	0.23M
Tamil Nadu	1.58M
Total	34.60M

vehicle_category

2-Wheelers

4-Wheelers



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. H

269.28%

Growth Rate 2022-2024 2W

367.79%

Growth Rate 2022-2024 4W

28.13%

Growth Rate 2023 2024 2W

83.08%

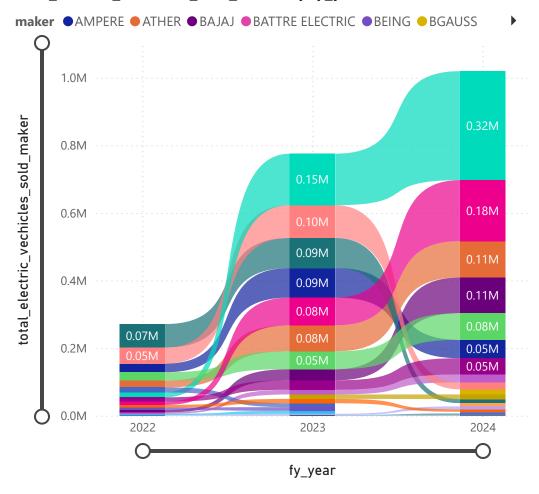
Growth Rate 2023-2024 4W

vehicle_category

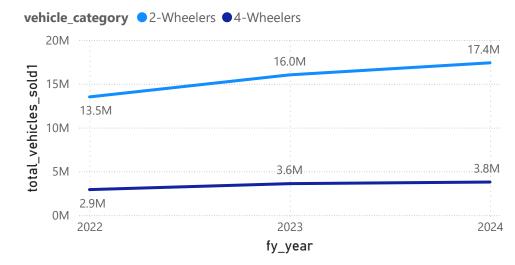
2-Wheelers

4-Wheelers

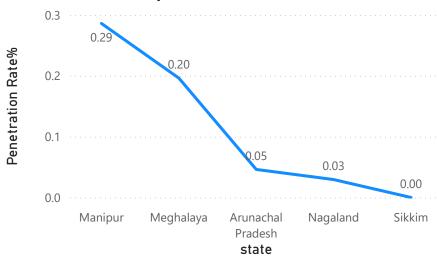
total_electric_vechicles_sold_maker by fy_year and maker



total_vehicles_sold1 by fy_year and vehicle_category



Penetration Rate% by state



AvgMonthlyEVSales by Month



Month

state	Sum of electric_vehicles_sold	Sum of total_vehicles_sold
Andaman & Nicobar Island	80	18885
Andhra Pradesh	77422	2283871
Arunachal Pradesh	33	71547
Assam	6418	1403271
Bihar	31019	3048373
Chandigarh	5279	130628
Chhattisgarh	53804	1334989
Delhi	107312	1588436
DNH and DD	355	43397
Goa	19684	199970
Gujarat	181389	4125551
Haryana	30797	1902768
Himachal Pradesh	2595	325366
Jammu and Kashmir	5971	414553
Jharkhand	18461	1364886
Karnataka	312995	3994329
Kerala	137060	2064677
Ladakh	68	10496
Madhya Pradesh	78979	3498698
Maharashtra	396045	6101429
Manipur Total	299 2066111	104513 57220252