

# Presentation of Market Study Insights

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:

Maker	TEV
OLA ELECTRIC	489K
TVS	273K
ATHER	204K

Bottom 3:

Maker	TEV
JITENDRA	12K
KINETIC GREEN	10K
BATTRE ELECTRIC	5K

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

2-Wheelers:

State	2-Wheelers			
	TV	TEV	PR	CAGR%
Goa	54K	10K	17.99%	0.00%
Kerala	479K	65K	13.52%	0.00%
Karnataka	1280K	148K	11.57%	0.00%
Maharashtra	1817K	183K	10.07%	0.00%
Delhi	405K	38K	9.40%	0.00%

4-Wheelers:

State	4-Wheelers			
	TV	TEV	PR	CAGR%
Kerala	159K	9K	5.76%	0.00%
Chandigarh	23K	1K	4.50%	0.00%
Delhi	201K	9K	4.29%	0.00%
Karnataka	302K	13K	4.26%	0.00%
Goa	24K	1K	4.25%	0.00%

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

State	2022	2023	PR
Andaman & Nicobar Island			-0.08%

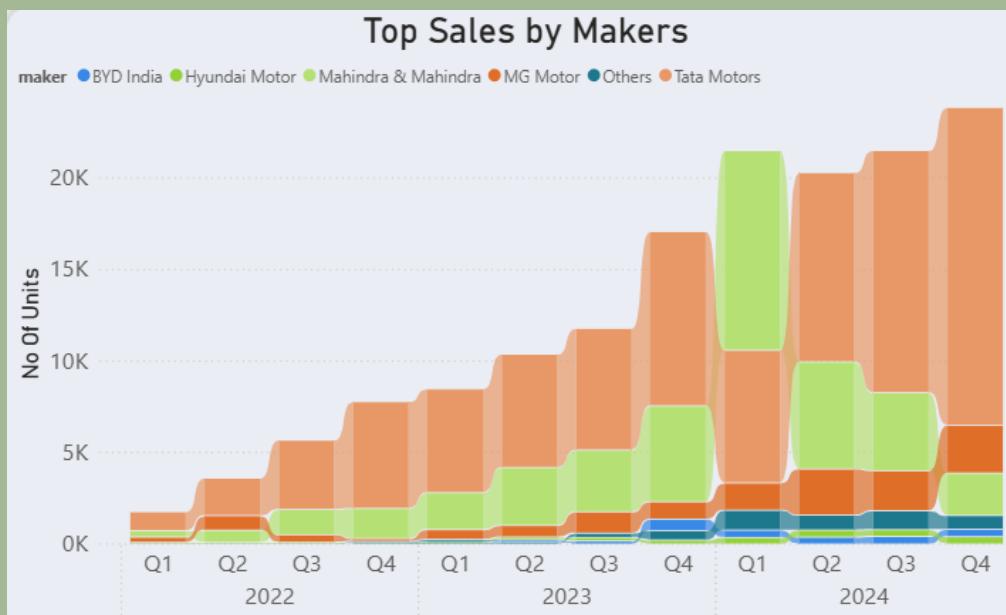
(From 2022 to 2023)

State	2022	2023	PR	2023	2024	PR
Rajasthan		3.39%			-0.56%	
Haryana		0.92%			-0.43%	
Uttarakhand		1.90%			-0.39%	
Gujarat		3.84%			-0.19%	
Jharkhand		1.07%			-0.15%	
Himachal Pradesh		0.55%			-0.11%	

(From 2023 to 2024)

There are no states with negative penetration rate during the period 2022-2024

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



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

2-4 wheeler split	All				2-Wheelers				4-Wheelers			
	State	TV	TEV	PR	CAGR%	TV	TEV	PR	CAGR%	TV	TEV	PR
Karnataka	1582K	161K	10.18%	0.00%	1280K	148K	11.57%	0.00%	302K	13K	4.26%	0.00%
Delhi	606K	47K	7.71%	0.00%	405K	38K	9.40%	0.00%	201K	9K	4.29%	0.00%
Total	2188K	208K	9.49%	0.00%	1685K	186K	11.05%	0.00%	503K	22K	4.27%	0.00%

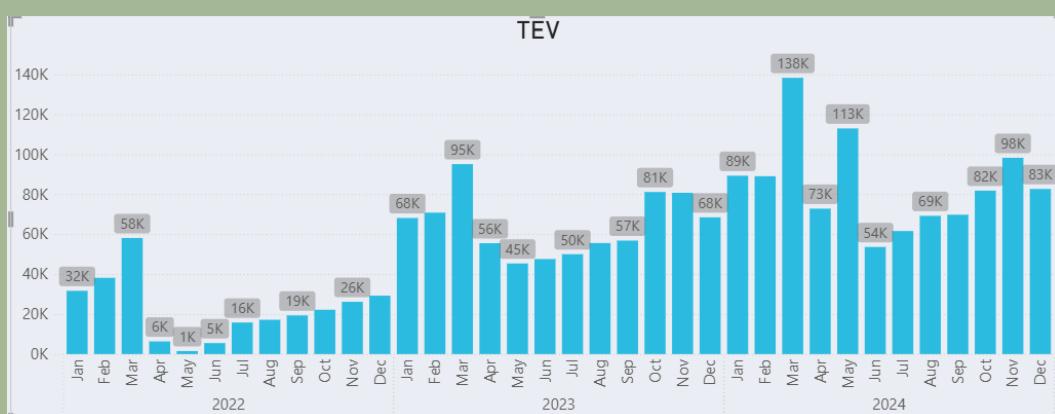
6. List down the compounded annual growth rate (CAGR) in 4-wheeler units for the top 5 makers from 2022 to 2024.

Maker	2022	2023	2022	2024
	CAGR		CAGR	
Tata Motors		121%		167%
MG Motor		99%		209%
Mahindra & Mahindra		242%		219%
Hyundai Motor		424%		341%
BYD India		2688%		659%
<b>Total</b>		<b>151%</b>		<b>187%</b>

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

2-4 wheeler split	All			
	State	TV	TEV	PR
Meghalaya	90K	0K	0.20%	567.89%
Tripura	125K	1K	0.45%	313.96%
Nagaland	44K	0K	0.03%	282.84%
Chandigarh	131K	5K	4.04%	244.95%
Chhattisgarh	1335K	54K	4.03%	230.10%
West Bengal	2736K	31K	1.12%	229.80%
Goa	200K	20K	9.84%	225.25%
DNH and DD	43K	0K	0.82%	215.80%
Uttar Pradesh	8127K	95K	1.17%	215.65%
Madhya Pradesh	3499K	79K	2.26%	211.19%
Kerala	2065K	137K	6.64%	210.26%
<b>Total</b>	<b>57220K</b>	<b>2066K</b>	<b>3.61%</b>	<b>166.14%</b>

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	▼ PR	CAGR%	2024_TV	2024_Tot_EV	Estm 2030 TEV
Goa	9.84%	225.25%	79K	11K	12.78M
Karnataka	7.84%	165.36%	1,582K	161K	56.21M
Delhi	6.76%	135.12%	606K	47K	7.89M
Kerala	6.64%	210.26%	638K	74K	65.96M
Maharashtra	6.49%	175.38%	2,294K	197K	85.99M
Odisha	4.63%	176.59%	618K	39K	17.52M
Rajasthan	4.55%	151.91%	1,300K	66K	16.98M
Gujarat	4.40%	191.83%	1,591K	84K	52.11M
Tamil Nadu	4.30%	124.84%	1,717K	94K	12.18M
Chandigarh	4.04%	244.95%	45K	3K	4.85M

Note: The CAGR estimation is highly inflated as the dataset at hand only comprises of the early market booming phase, it's very likely that the CAGR% flattens by a considerable amount leading to much lower Total EVs than the predicted value, altho doing this analysis 2 years from now will give a more reasonable estimation.

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.

Category	TV 2022 (K)	TV 2023 (K)	TV 2024 (K)	Rev 2022 (B)	Rev 2023 (B)	Rev 2024 (B)	% Change 22→24	% Change 23→24
2-Wheelers	253K	728K	933K	21.47	61.87	79.28	269%	28.10%
4-Wheelers	19K	47K	87K	27.87	71.2	130.35	368%	83%