

PROJECT OBJECTIVE



- Create an interactive dashboard which shows how rapidly electric vehicles has captured the market.
- Along with create a detail insights based on cars company, dealers, models.
- To understand the overall landscape of electric vehicles to assess the market size and growth

KPI'S REQUIREMENT



1. Sales overview:

- Year to date(YTD) Total Sales
- Month to date(MTD) Total Sales
- Year to Year(YOY) Growth in Total Sales
- Difference between YTD Sales and Previous Year to date(PYTD) Sales

2. Average Price analysis:

- YTD Average price
- MTD Average price
- YOY Growth in Average price
- Difference in YTD Average price and PYTD Average price

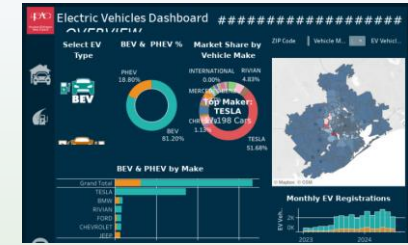
KPI'S REQUIREMENT



3. Car sold metrics:

- YTD Cars sold
 - MTD Cars sold
 - YOY Growth in Cars sold
- Difference between YTD Cars sold and PYTD Car sold

CHART'S REQUIREMENT



1. YTD Sales weekly trend
2. YTD Total sales by body style
3. YTD Total sales by colour
4. YTD car sold by dealer region
5. Company-wise sales trend in grid form
6. Details grid showing all car sales information

PROJECT INSIGHTS



Sales overview:

- Year to date(YTD) Total Sales is \$371.2M
- Month to date(MTD) Total Sales is \$54.28M
- Year to Year(YOY) Growth in Total Sales has increased by 23.59%
- Difference between YTD Sales and Previous Year to date(PYTD) Sales is \$70.8M

Average Price analysis:

- YTD Average price is \$28.0K
- MTD Average price is \$28.26K
- YOY Growth in Average price has decreased by 0.79%
- Difference in YTD Average price and PYTD Average price (\$0.22K)

PROJECT INSIGHTS



Car sold metrics:

- The highest sales growth by weekly trend is in the 36th week of \$14.9M.
- It seems that customer prefer SUV type body style cars according to data as the sale of SUV is highest which is \$100M.
- Colour preference of customers is pale white with 47.02% sales growth.
- EV cars are sold mostly in the city of Austin with a count of 2296 numbers of cars.

DAX QUERY



1. Sales overview:

- YTD TOTAL SALES = `TOTALYTD(SUM(car_data[Price ($)]), 'Calender table'[Date])`
- PYTD TOTAL SALES = `CALCULATE(SUM(car_data[Price ($)]), SAMEPERIODLASTYEAR('Calender table'[Date]))`
- SALES DIFFERENCE = `[YTD TOTAL SALES] - [PYTD TOTAL SALES]`
- YOY SALES GROWTH = `[SALES DIFFERENCE]/[PYTD TOTAL SALES]`
- MTD TOTAL SALES = `TOTALMTD(SUM(car_data[Price ($)]), 'Calender table'[Date])`
- MTD KPI = `CONCATENATE("MTD TOTAL EV SALES : ", FORMAT([MTD TOTAL SALES] / 1000000, "$0.00M"))`
- Max point = `IF(MAXX(ALLSELECTED('Calender table'[Week]), [Total sales]) = [Total sales], MAXX(ALLSELECTED('Calender table'[Week]), [Total sales]), BLANK())`

DAX QUERY



2. Average Price analysis:

- YTD AVERAGE PRICE = `TOTALYTD([Average price], 'Calender table'[Date])`
- MTD AVH SALES = `TOTALMTD([Average price], 'Calender table'[Date])`
- MTD AVG KPI = `CONCATENATE("MTD AVG EV SALES : ", FORMAT([MTD AVH SALES]/1000, "$0.00K"))`
- PYTD AVG SALES = `CALCULATE([Average price], SAMEPERIODLASTYEAR('Calender table'[Date]))`
- Avg price difference = `[YTD AVERAGE PRICE] - [PYTD AVG SALES]`
- YOY AVG GROWTH = `[Avg price difference]/[PYTD AVG SALES]`

DAX QUERY



3. Car sold metrics:

- YTD EV CAR SOLD = `TOTALYTD(COUNT(car_data[Car_id]), 'Calender table'[Date])`
- MTD CAR SOLD = `TOTALMTD(COUNT(car_data[Car_id]), 'Calender table'[Date])`
- MTD CAR SOLD KPI = `CONCATENATE("MTD EV CAR SOLD : ", FORMAT([MTD CAR SOLD] / 1000, "$0.00K"))`
- PYTD CAR SOLD = `CALCULATE(COUNT(car_data[Car_id]), SAMEPERIODLASTYEAR('Calender table'[Date]))`
- Car sold difference = `[YTD EV CAR SOLD] - [PYTD CAR SOLD]`
- YOY Car sold growth = `car_data[Car sold difference]/[PYTD CAR SOLD]`

PROJECT INSIGHTS



- Created a power BI dashboard of electric vehicles sales trend for the year 2022-23.
- In this project I did data cleaning in power query editor, build relation using data modelling between calendar table and car sold table
- Used time intelligence functions like Year to date(YTD), Month to date(MTD), Previous Year to date(PYTD)
- Used custom charts, maps to draw visual insights from the data.
- Used conditional formatting, filters, navigations, new card visuals, creating KPI'S.
- Created a Grid view dashboard displaying a table of all car details.