**KPI’S Requiremnets**

**1. Total Vehicles:**

**Understand the overall landscape of electric vehicles, encompassing both BEVs and PHEVs, to assess the market's size and growth.**

**2. Average Electric Range:**

**Determine the average electric range of the electric vehicles in the dataset to gauge the technological advancements and efficiency of the EVs.**

**3. Total BEV Vehicles and % of Total BEV Vehicles:**

**Identify and analyze the total number of Battery Electric Vehicles (BEVs) in the dataset.**

**Calculate the percentage of BEVs relative to the total number of electric vehicles, providing insights into the dominance of fully electric models.**

**4. Total PHEV Vehicles and % of Total PHEV Vehicles:**

**Identify and analyze the total number of Plug-in Hybrid Electric Vehicles (PHEVs) in the dataset.**

**Calculate the percentage of PHEVs relative to the total number of electric vehicles, offering insights into the market share of plug-in hybrid models.**

**CHARTS REQUIREMENTS**

**1. Total Vehicles by Model Year (From 2010 Onwards):**

* 1. **Visualization: Line/ Area Chart**
  2. **Description: This chart will illustrate the distribution of electric vehicles over the years, starting from 2010, providing insights into the growth pattern and adoption trends.**

**2. Total Vehicles by State:**

1. **Visualization: Map Chart**
2. **Description: This chart will showcase the geographical distribution of electric vehicles across different states, allowing for the identification of regions with higher adoption rates.**

**3. Top 10 Total Vehicles by Make:**

1. **Visualization: Bar Chart**
2. **Description: Highlight the top 10 electric vehicle manufacturers based on the total number of vehicles, providing insights into the market dominance of specific brands.**

**4. Total Vehicles by CAFV Eligibility:**

1. **Visualization: Pie Chart or Donut Chart**
2. **Description: Illustrate the proportion of electric vehicles that are eligible for Clean Alternative Fuel Vehicle (CAFV) incentives, aiding in understanding the impact of incentives on vehicle adoption.**

**5. Top 10 Total Vehicles by Model:**

1. **Visualization: Tree map**
2. **Description: Highlight the top 10 electric vehicle models based on the total number of vehicles, offering insights into consumer preferences and popular models in the market.**

**APPLICATIONS USED :**

1. **Microsoft Excel**
2. **Tableau Public 2024.2**