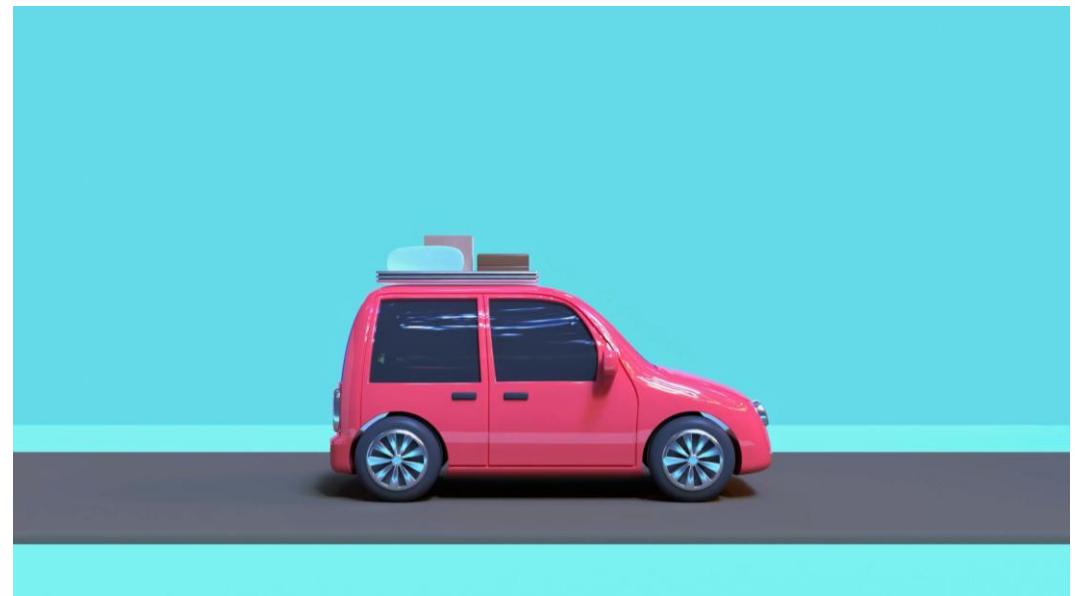


# ELECTRIC VEHICLE DATA ANALYSIS



## KPI'S Requirement



# PROBLEM STATEMENT

Total	Average	Total	Total
<p><b>Total Vehicles:</b></p> <ul style="list-style-type: none"><li>Understand the overall landscape of electric vehicles, encompassing both BEVs and PHEVs, to assess the market's size and growth.</li></ul>	<p><b>Average Electric Range:</b></p> <ul style="list-style-type: none"><li>Determine the average electric range of the electric vehicles in the dataset to gauge the technological advancements and efficiency of the EVs.</li></ul>	<p><b>Total BEV Vehicles and % of Total BEV Vehicles:</b></p> <ul style="list-style-type: none"><li>Identify and analyze the total number of Battery Electric Vehicles (BEVs) in the dataset.</li><li>Calculate the percentage of BEVs relative to the total number of electric vehicles, providing insights into the dominance of fully electric models.</li></ul>	<p><b>Total PHEV Vehicles and % of Total PHEV Vehicles:</b></p> <ul style="list-style-type: none"><li>Identify and analyze the total number of Plug-in Hybrid Electric Vehicles (PHEVs) in the dataset.</li><li>Calculate the percentage of PHEVs relative to the total number of electric vehicles, offering insights into the market share of plug-in hybrid models.</li></ul>

## Charts Requirement

### Total Vehicles by Model Year (From 2010 Onwards):

- Visualization: Line/ Area Chart
- 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:

- Visualization: Map Chart
- 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:

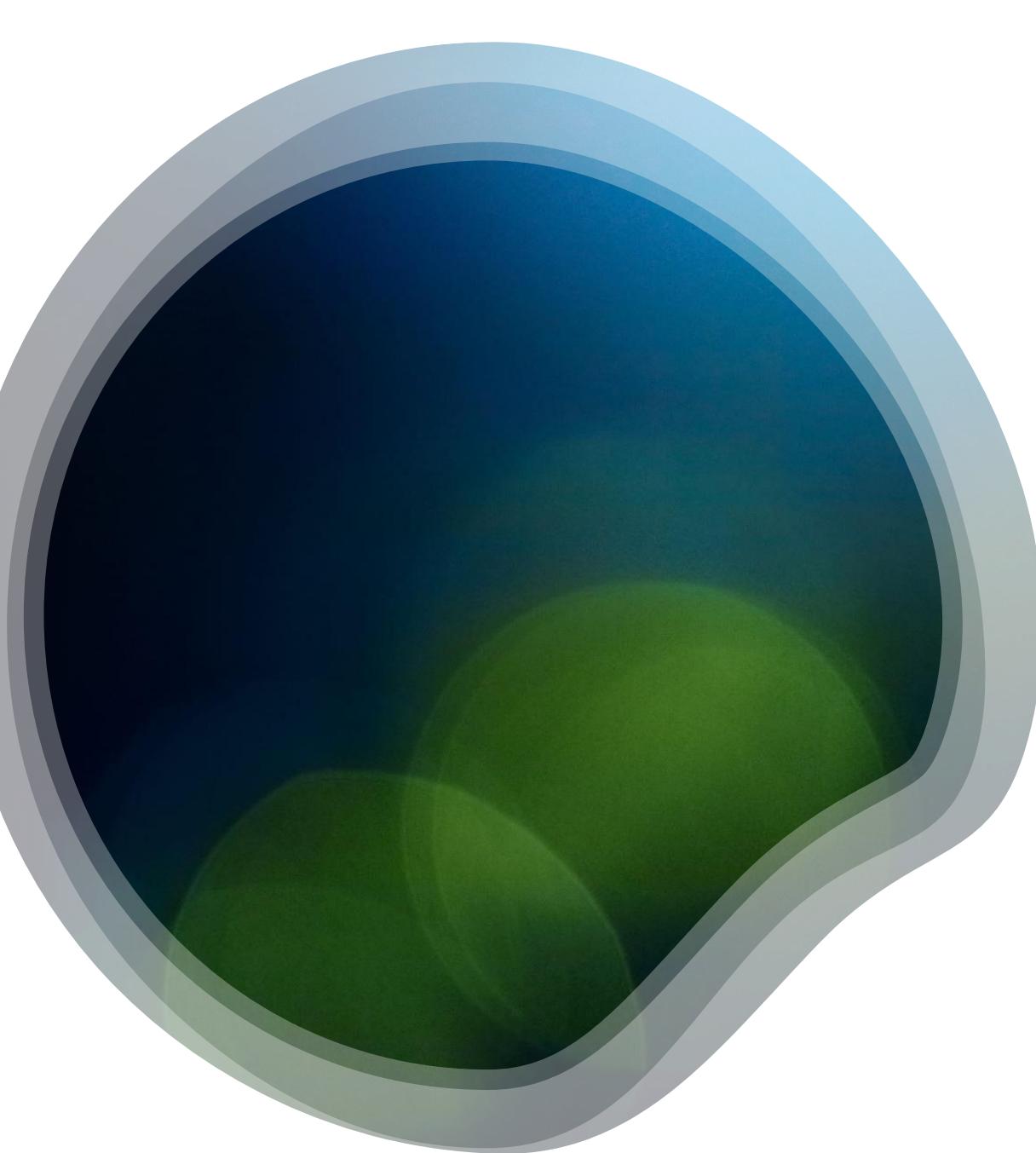
- Visualization: Bar Chart
- Description: Highlight the top 10 electric vehicle manufacturers based on the total number of vehicles, providing insights into the market dominance of specific brands.

### 4. Total Vehicles by CAFV Eligibility:

- Visualization: Pie Chart or Donut Chart
- 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:

- Visualization: Tree map
- 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.



## SOFTWARES USED



**1. MS EXCEL**



**2. Tableau**