ELECTRIC VEHICLE ANALYSIS

Total Vehicles
150.42K

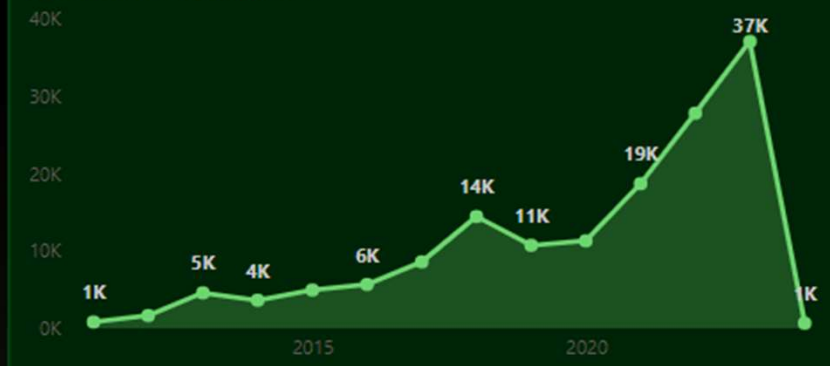
Avg Electric Range
67.83

BEV Vehicles
117K
% Of BEV
78%

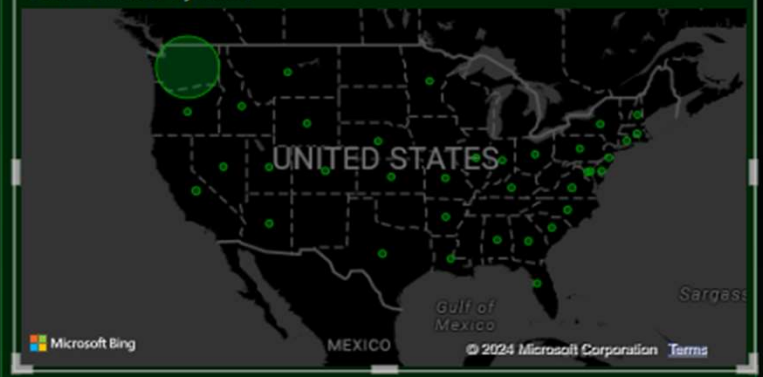
PHEV Vehicles
34K
% Of PHEV
22%

FLITER PANEL | City: All | Electric Utility: All | Electric Vehicles Type: All

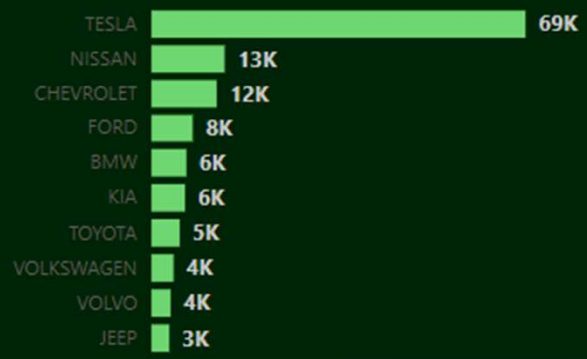
Total Vehicles by Model Year



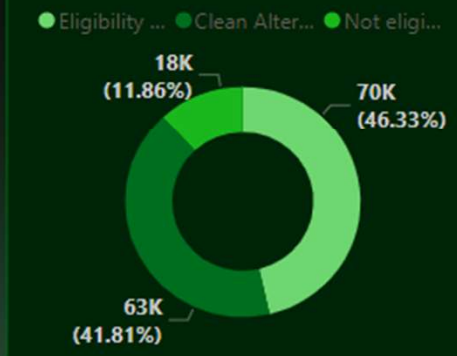
Total Vehicles by State



Total Vehicles by Make



Total Vehicles by (CAFV) Eligibility



Total Vehicles by Model

ELECTRIC VEHICLE ANALYSIS

Total Vehicles
69.70K

Avg Electric Range
0.00

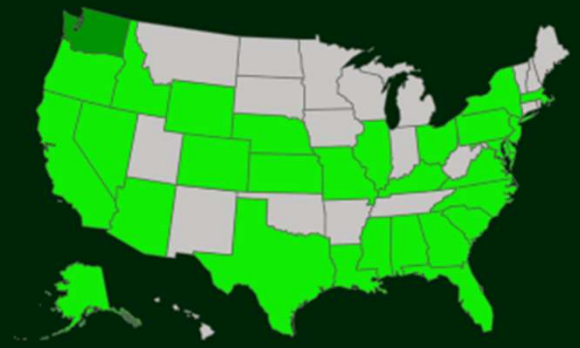
BEV Vehicles
70K
% Of BEV
100%

PHEV Vehicles
(Blank)
% Of PHEV
(Blank)

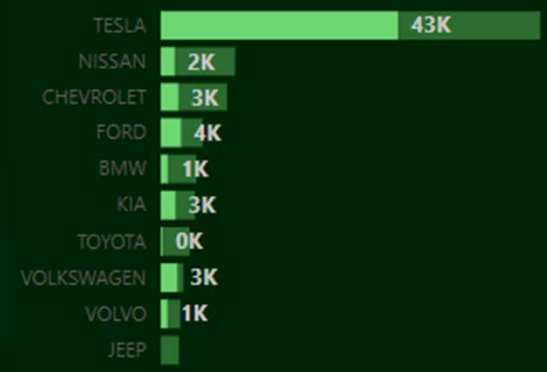
FLITER PANEL | City: All | Electric Utility: All | Electric Vehicles Type: All

Total Vehicles by Model Year

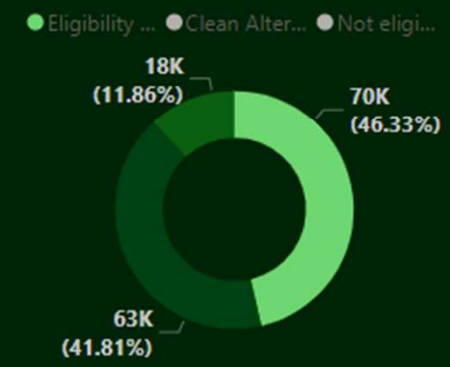
Total Vehicles by State



Total Vehicles by Make



Total Vehicles by (CAFV) Eligibility



Total Vehicles by Model

Electric Vehicles Analytics

"Tools like Power BI and Excel for Visualization Dashboards."

This Power BI project has been a learning experience for me, teaching me how to clean data, utilize DAX calculations for analysis, and create insightful visualizations that draw out key insights from the data."

PROBLEM STATEMENT

KPI Requirements

1. Total Vehicles: Gain a comprehensive understanding of the electric vehicle landscape, encompassing both Battery Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs), to assess the market's size and growth trajectory.
2. Average Electric Range: Determine the mean electric range of the electric vehicles in the dataset to gauge the technological advancements and efficiency of EVs, providing insights into their practical usability and consumer appeal.
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, offering insights into the prevalence and market share 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, providing insights into the market penetration and consumer acceptance of plug-in hybrid models.

PROBLEM STATEMENT

DATA TUTORIAL

Charts Requirement

1.Total Vehicles by Model Year (From 2010 Onwards): Visualization: Line/Area Chart Description: This visualization will display the distribution of electric vehicles over the years, starting from 2010, providing insights into the growth pattern and adoption trends over time.
2.Total Vehicles by State: Visualization: Map Chart Description: This chart will present the geographical distribution of electric vehicles across different states, facilitating the identification of regions with higher adoption rates and regional trends.
3.Top 10 Total Vehicles by Make: Visualization: Bar Chart Description: This chart will emphasize the top 10 electric vehicle manufacturers based on the total number of vehicles, shedding light on the market dominance of specific brands and their popularity among consumers.
4.Total Vehicles by CAFV Eligibility: Visualization: Pie Chart or Donut Chart Description: This visualization will illustrate the proportion of electric vehicles eligible for Clean Alternative Fuel Vehicle (CAFV) incentives, aiding in understanding the influence of incentives on vehicle adoption rates.
5.Top 10 Total Vehicles by Model: Visualization: Tree Map Description: This visualization will showcase the top 10 electric vehicle models based on the total number of vehicles, providing insights into consumer preferences and the popularity of specific models in the market.

INSIGHT ANALYSIS

- **Tesla is the most popular brand of electric vehicle in the United States, with over 69,000 vehicles on the road.** This is more than four times the number of the next closest brand, Nissan.

  The Tesla Model Y is the most popular electric vehicle model in the United States, with over 37,000 vehicles on the road. This is more than twice the number of the next closest model, the Nissan Leaf.

  Battery electric vehicles (BEVs) are more popular than plug-in hybrid electric vehicles (PHEVs) in the United States, accounting for 78% of all electric vehicles.

  The average electric vehicle in the United States has a range of 67.83 miles.

  California is the state with the most electric vehicles on the road, with over 19,000.

Thank You