Electric Vehicle Market Analysis - Tableau Dashboard Project

Tools Used: Tableau, Excel

Project Overview:

Analyzed electric vehicle adoption trends in the U.S. using a dataset of 113,015 EVs registered from 2011 to 2024.

Key Insights:

- Total Vehicles Analyzed: 113,015
  - Battery Electric Vehicles (BEVs): 95,915 (84.87%)
  - Plug-in Hybrid Electric Vehicles (PHEVs): 17,100 (15.13%)
- Average Electric Range: 80.94 miles
- Adoption Trends by Year:
  - Significant growth observed post-2017, peaking in 2022 with 24.8K EVs registered
  - Consistent year-over-year increase from 800 vehicles in 2011 to 19.9K in 2021

Top Manufacturers by Total Vehicles:

- Tesla: 68,932 vehicles (60.99%) - Market leader by a large margin
- Nissan: 13,187 vehicles (11.67%)
- Chevrolet: 4,274 vehicles (3.78%)

Top 5 EV Models by Popularity:

- Tesla Model Y: 25.22% of total vehicles
- Tesla Model 3: 24.52%
- Nissan Leaf: 11.67%
- Tesla Model S: 6.73%
- Chevrolet Bolt EV: 5.07%

State-Wise Distribution:

California alone accounts for 112,772 EVs - ~99.8% of total dataset, showing clear geographic concentration

CAFV Eligibility Breakdown:

- CAFV Eligible Vehicles: 52,645 (46.56%)

- CAFV Not Eligible: 6,419 (5.68%)

- Unknown Eligibility: 53,951 (47.74%)