Developing an Interactive Data Visualization Platform to Present the Adaption of Electrical Vehicles in Washington, California and New York

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Abstract

Objectives

Identifying the data analytics & visualization tools to understand the data
Showing & explaining the reasons for the difference in the number of EVs in each state
Raising the awareness of how important are EVs for the environment and humans

Methodology

Data Collection
Data Cleaning
Data Visualization
Interpretation the results

Washington

California

New York

California, New York, & Washington

Conclusion

This research aims to perform visualization of electric vehicle data in the United States using the data visualization method. The main outcomes summarized as the following:
• California's own has the highest number of EVs.
• Toyota, Tesla, and Chevrolet are the most widespread brands for EVs in the three states.
• In WA state we will find that there is a split for around 2 BEV for every 1 PHEV, but the PHEV started to slightly increase more at the end of Dec. 2017.
• The number of electric stations and charging outlets is consistent with the quantity of EVs in each state.

According to the obtained results, the USA has a future vision for having a sustainable environment as the country is planning on increasing the number of EVs to reduce the amount of GHG emission and fossil fuel. Moreover, there are more investments by the country to improving vehicle technology.

References