

Assignment 0

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Main topics

The main topic of my final portfolio is electric vehicles (EVs). EVs are seen as vital to decarbonize road transport, which is a sector that accounts for 16% of global emissions. In recent years, electric vehicle sales are continually breaking records. There are plenty of countries and regions in this world that have already developed a vision and target of electric mobility: China, India, Japan, the United States, Europe, and so on. In this data portfolio, the analyses focus on both the United States' domestic and international deployment of electric vehicles. Topics span from types of EVs, the cost of purchasing EVs compared to conventional vehicles, EV charging infrastructure deployment, to the international progress on vehicle electrification.

Data sources & Datasets

[Alternative Fuel Data Center](#): Vehicle Registration Counts by State, Alternative Fueling Station Locator, Station Counts by State, Federal and State Laws and Incentives

[International Energy Agency](#): Global EV Data Explorer, Global EV Policy Explorer

[U.S. Energy Information Administration](#): State Energy Data System

Preliminary plan for portfolio contents

The visualizations included in this portfolio serve two primary purposes. Firstly, they aim to provide a comprehensive overview of the current state of electric vehicle (EV) markets, with a specific focus on the United States. This is achieved by analyzing various key indicators such as the cost of driving gasoline versus charging an EV in different states, evaluating the convenience of charging infrastructure across states, examining the EV-to-charger ratio, and exploring the types of EVs that dominate global markets.

Secondly, the visualizations seek to assess the impact of specific policies on EV adoption. For instance, they investigate the deployment of different types of EV charging stations before and after the implementation of Biden's Bipartisan Infrastructure Law. Furthermore, they explore the differences in EV market trends between states with and without pro-electric vehicle policies. These visualizations intend to provide insights into the effectiveness of relative policies in promoting the adoption of EVs.