Greenhouse Gas Emission over Time

Introduction

With the growing change in the global climate. It is important to study the factors causing it. Greenhouse gas emission is one such factor causing the change. In this project, few research questions regarding the greenhouse gas emission will be answered through visualization analysis.

Questions

1. How much is the change through emission of greenhouse gas over the last decade?
2. Which part of the country contributes to most of the emission?
3. Is the emission causing a significant change in global climate?
4. Does large companies release most of the world's greenhouse gas?

Data descriptions

Greenhouse Gas Emissions: This dataset contains data on companies and industries releasing greenhouse gases between 2010 and 2020.
Link: https://www.epa.gov/ghgreporting/data-sets

Reported Parent Companies: This dataset contains information about the parent companies.
Link: https://www.epa.gov/system/files/other-files/2021-10/ghgp_data_parent_company_10_2021.xlsb

Global Temperatures: This dataset contains data about the global temperatures for the last 200 years.
Link: https://www.kaggle.com/berkeleyearth/climate-change-earth-surface-temperature-data

Platforms

For our project, we intend to make extensive use of Tableau. By importing multiple data sources and processing them, we can build informative visualizations to uncover insights from the data in efforts to answer the questions posed. From there, we can use the individual visualizations to build dashboard. The dashboards and storyboards we build with our data can then be the centerpiece for our report on the data analysis and exploration of these questions.

Expected answers

We expect to show a map showing the location of the industries causing the release of the greenhouse gases. And a choropleth map showing the temperatures across the globe. By this above maps we can show some relation between the release of gases and global climate change.

Members and roles

1. Importing data sources, cleaning data, merging data
2. Building visualizations, creating filters, possible interactive features
3. Building dashboards
4. Writing report.