

CS 6730 Data Visualization Principles

M3: Project Overview

Team Name: Vizzlers

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Topic: Global Energy Consumption over the years

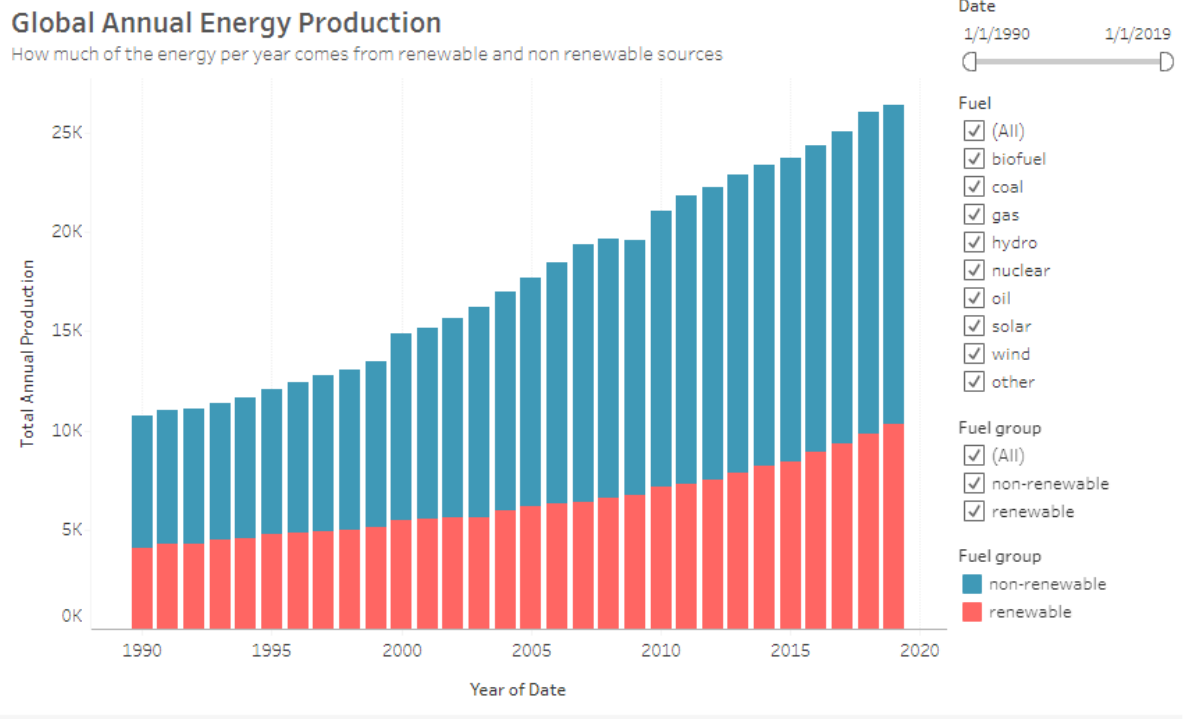
Description of problem and project overview:

Energy helps economies flourish and sustains societies. Energy production and consumption is the largest contributor to global warming. There has been a steadily growing trend of switching to renewable sources of energy to help save the climate and deal with depleting conventional energy sources. In today's age of alarming levels of climate change, rising surface temperatures, immense pollution, melting ice caps, holes in the ozone layer, there is increasing concern and discussion around saving our planet. It is a well known fact that changes observed in Earth's climate since the mid-20th century are driven by human activities, particularly fossil fuel burning, which increases heat-trapping greenhouse gas levels in Earth's atmosphere, raising Earth's average surface temperature. While there are efforts being taken to switch to greener alternatives, where exactly are we in this shift? What are the primary sources of fuel that meet the majority of our needs even today? How is our current levels of energy consumption contributing towards pushing the planet to the brink in terms of increasing greenhouse gas emissions? How are different countries working towards shifting to renewable alternatives? What are some factors that are pushing us towards increased fuel consumption?

URL: <https://dmo98.github.io/CS-6730-Project/>

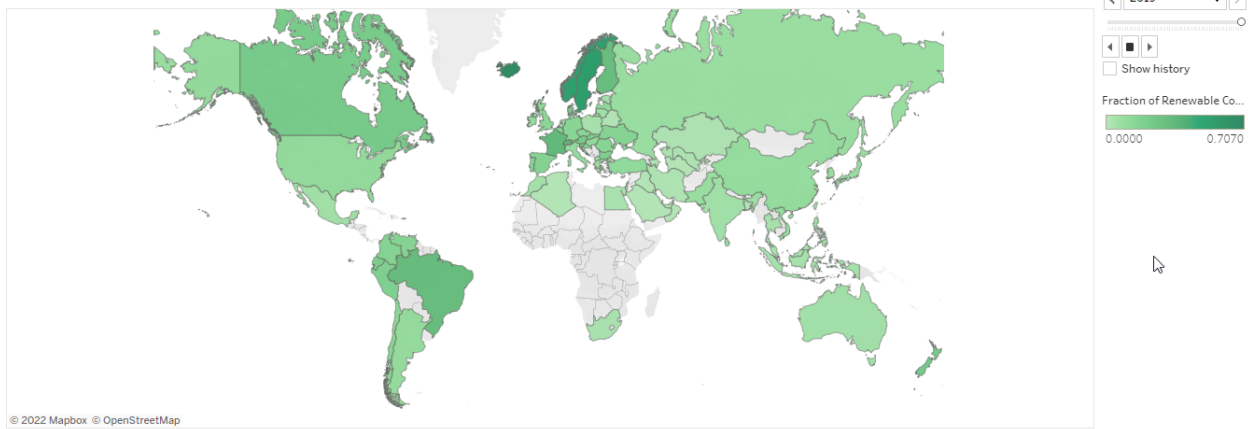
Screenshots of visualizations:

1. Global Annual Energy Production



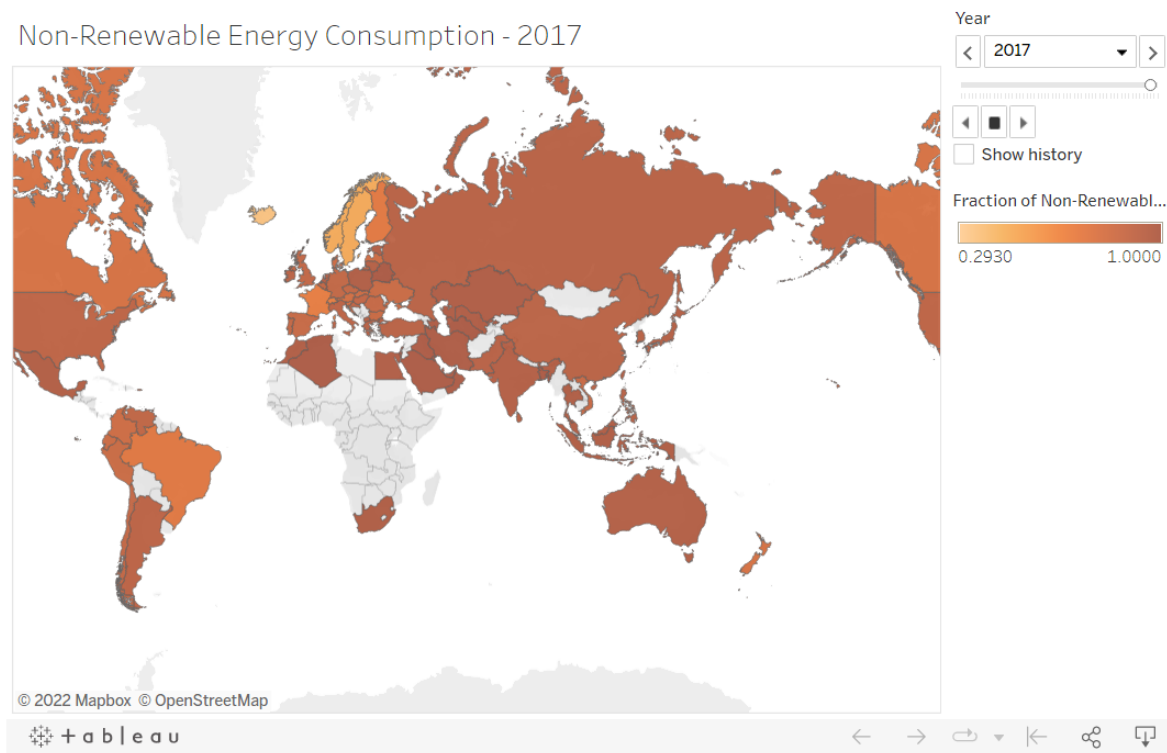
2. Renewable Energy Consumption by Country

Renewable Energy Consumption - 2019



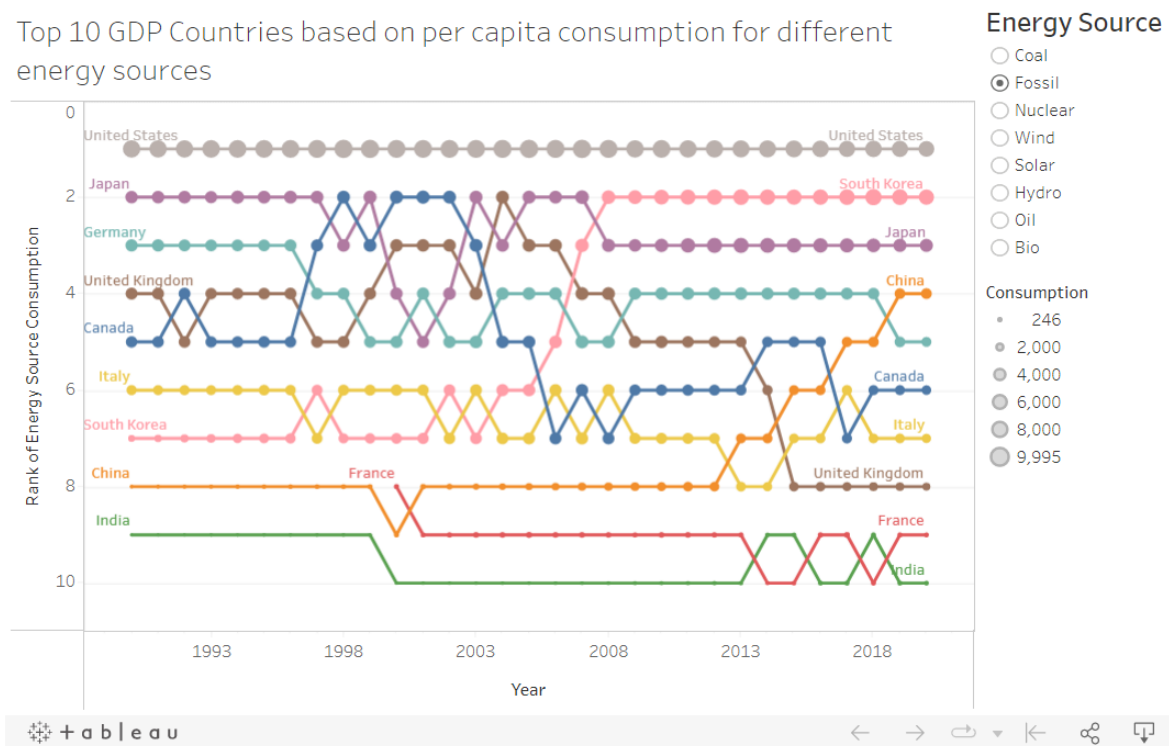
3. Non-Renewable Energy Consumption by Country

Non-Renewable Energy Consumption - 2017



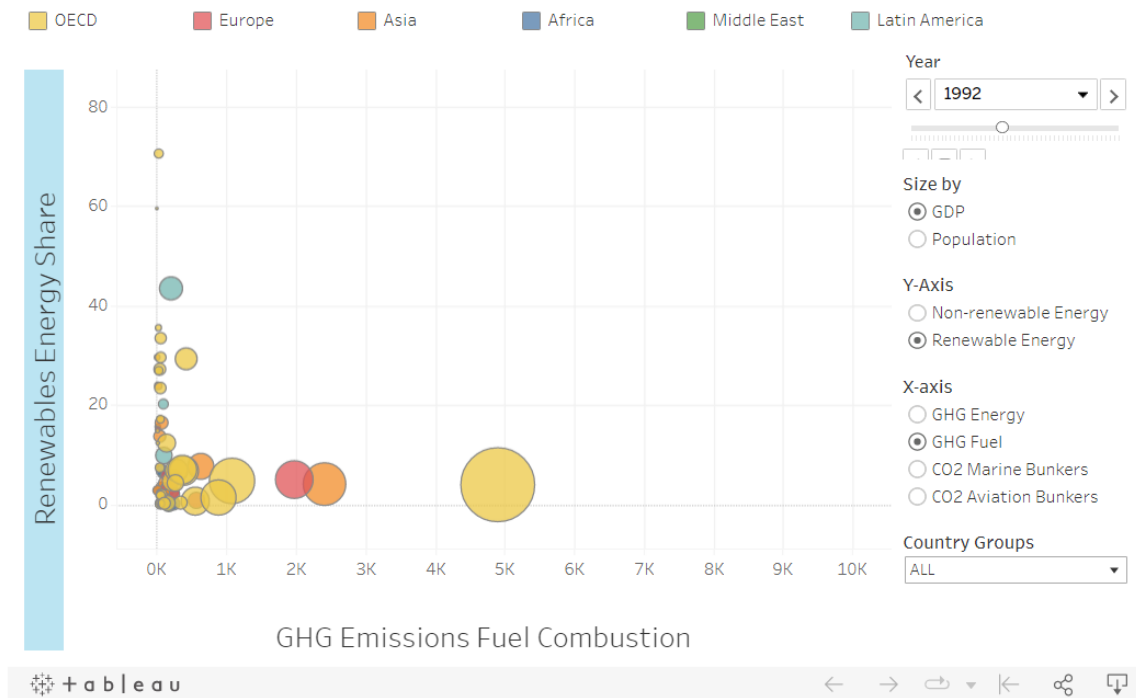
4. Rank of Top 10 GDP countries based on per capita consumption for different energy resources

Top 10 GDP Countries based on per capita consumption for different energy sources



5. Energy Share and GHG emissions for different countries

Energy share and GHG emissions for different countries



6. Social Factors that impact fuel consumption (Correlation Plots)

