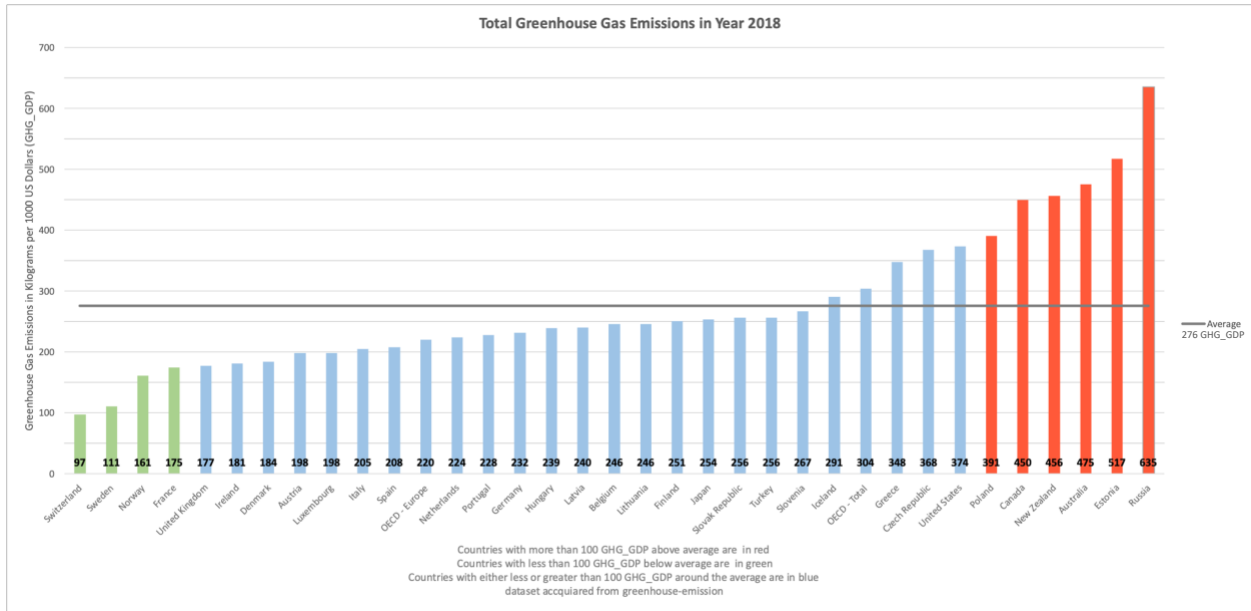Yongchen Qian

Title: Total Greenhouse gas emissions for each country in year 2018 (White Hat)
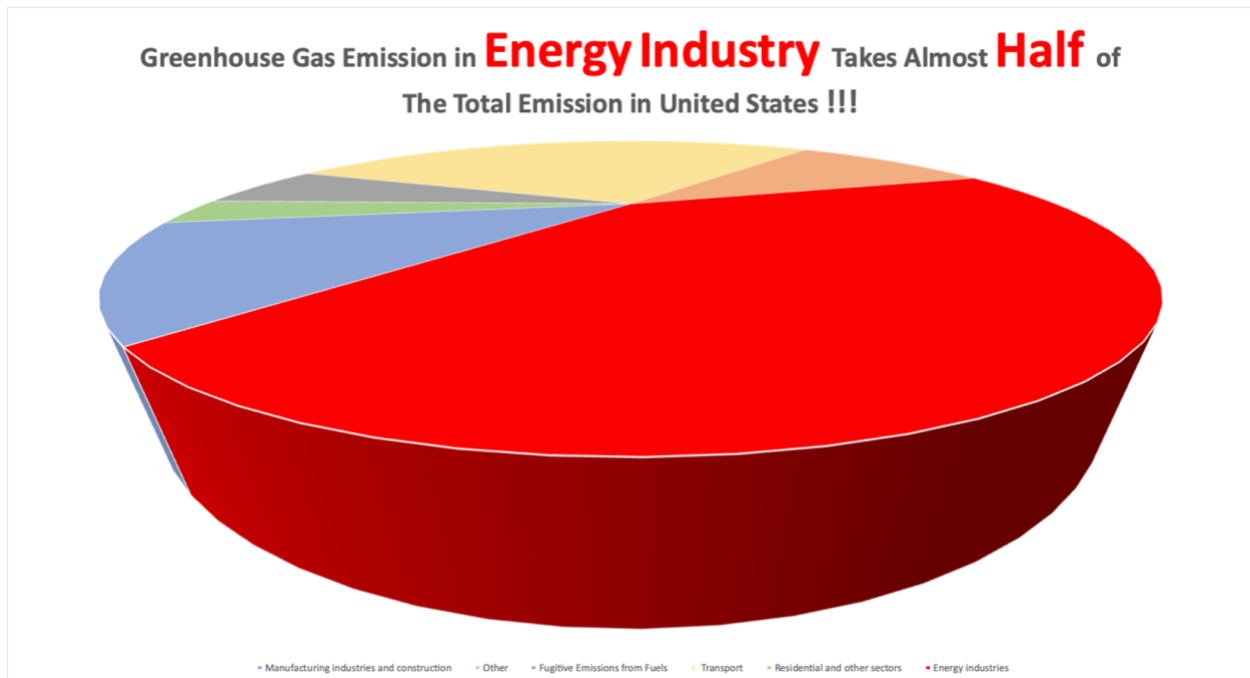

Description

This is a bar chart that shows the total greenhouse gas emissions in kilograms per 1000 US Dollars in year 2018 for 35 countries in sorted order from the least to the greatest emission (left to right). The only filters applied to this dataset is to select GPG_GDP and 2018. This dataset is obtained OECD Greenhouse Gas Emissions 1990-2017. The range of the y-axis goes from 0 to 700. The horizontal gray line is the average greenhouse emissions of these 35 countries. Red bars are countries that have more than 100 GHG_GDP over the average value, green bars are countries that have less than 100 GHG_GDP under the average value and blue bars are countries with either less or greater than 100 GHG_GDP around the average value. The average value is 276 GHG_GDP.

Motivation

Since we are comparing and ranking each countries total greenhouse gas emissions in year 2018, bar chart is the best choice as we can clearly see the lowest and highest and the relative position of each one among 35 countries. Also, by including a horizontal line showing the average value, it very easy to compare any country with the average value. The reason behind the color choices for different bars is that I think, in common sense, green represents health and sustainability, red represents pollution and warning in environmental degradation, and blue represents a state in between. Overall, I believe this graph displays a clear and transparent visualization that supports the goal of "white hat".

DISCLAIMER: This visualization was created as part of a visualization ethics assignment. Please use the information presented here with caution, as it may have been intentionally designed to be misleading.

Title: United States Total Greenhouse Gas Emission in Energy Sector (Black Hat)

Yongchen Qian

Greenhouse Gas Emission in Energy Industry Takes Almost Half of The Total Emission in United States !!!

Legend: Manufacturing industries and construction · Other · Fugitive Emissions from Fuels · Transport · Residential and other sectors · Energy industries

Description

This is a 3D pie chart that shows the greenhouse gases emissions in different sectors of United States in 2011. This dataset is acquired from OECD Greenhouse Gas Emissions 1990-2017. The unit for the data in this graph is Greenhouse gas emissions in tones of CO2 equivalent in thousands. The trend shown in the graph above is that greenhouse gas emission of Energy industries takes almost half of the total greenhouse gas emissions.

Motivation

The purpose of this graph is to draw people's attention onto the greenhouse gas emissions in Energy industries therefore call for stricter regulations on it. The angle and perspective of this 3D pie chart is deliberately rotated to make the Energy industries appear bigger. Moreover, I purposefully chose red for Energy industries and lighter colors for other sectors in order to make Energy industries stand out in the pie chart. Some texts of the title are also intentionally colored to red and enlarged to draw people's attention as soon as they read the text. I hide the resources of the data and the time of the data in the graph (filter set to be in year 2011). Overall, I think the 3D pie chart above supports the goal of "black hat".

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