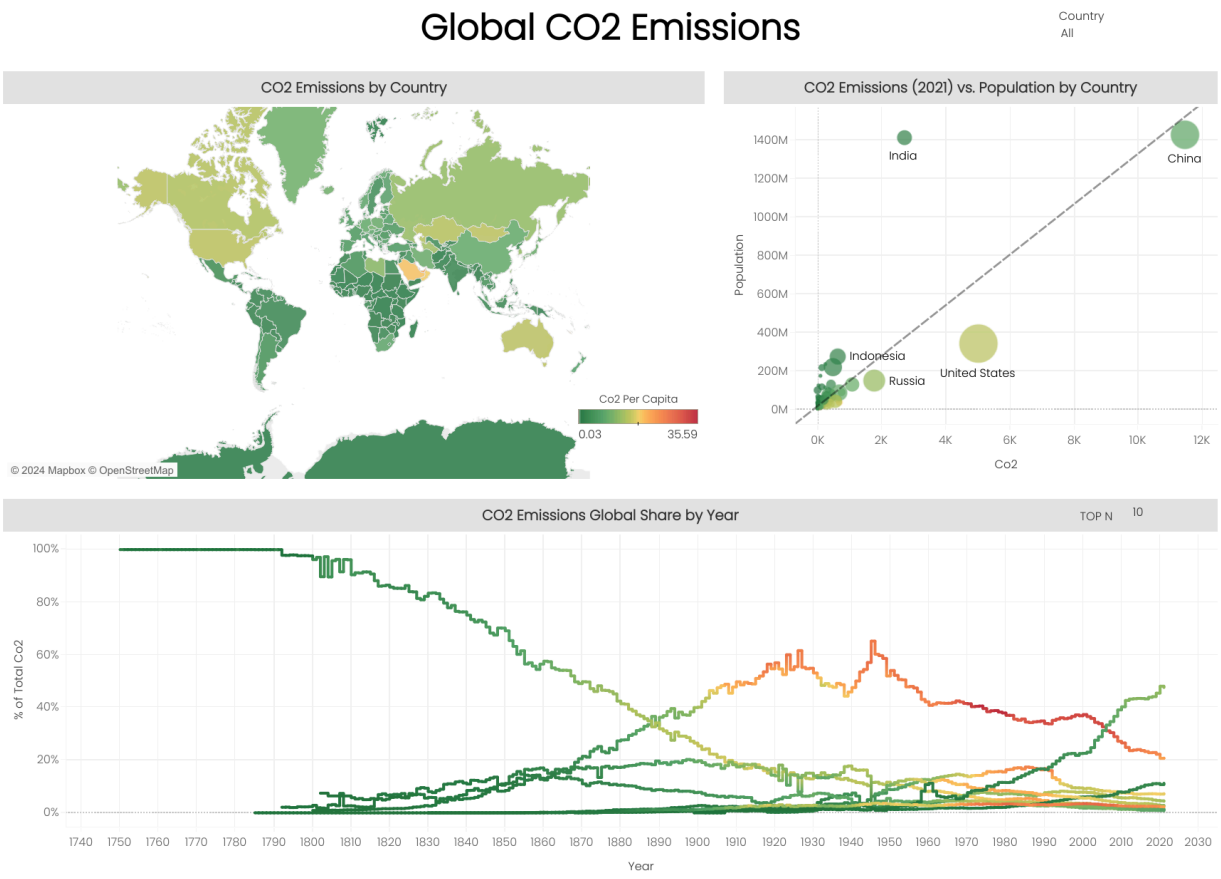
Global CO_2 Emissions Dashboard

Fictitious non-profit Maven Environmental is preparing to publish a publicly available Tableau dashboard displaying insights from a historical CO_2 emission dataset.



Project Tasks

1. Create a dynamic dashboard that can be used to identify patterns, trends, and drivers of global CO_2 emissions.
2. Determine the top ten countries that contribute to global CO_2 emissions.

Profile and QA the Data

Tasks to complete:

- Connect the csv file and extract the data.
- Create a bar chart to view the top 10 global CO_2 emitters.
- Add a data source filter to exclude NULL Iso codes.
- Convert all fields with “Co2” in their name to Number (Whole) and change to continuous.
- Create a new integer type parameter called TOP N with a default value of 10.

Visualize the Data

Tasks to complete:

- Create a sheet with a line chart showing the percentage of total share of CO2 by year for the top 10 countries using the TOP N parameter. Remove any null value countries.
- Create a sheet with a map at the country level using CO2 per capita for the year 2021. Fix any country or region spelling/naming errors and remove null value countries.
- Create a sheet with a scatterplot comparing CO2 and population at country level. Bubbles should be sized by temp change from CO2 for 2021. Add a linear regression trend line.
- Color all three visualizations using CO2 per capita and apply a divergent color scale.

Build an Interactive Dashboard

Tasks to complete:

- Add sheets to the dashboard and assemble visualizations with the TOP N parameter at the top right.
- Add a filter for country and apply it to all sheets.

Insights

Which ten countries emit the most CO_2 per capita (2021)?

1. United States
2. China
3. Russia
4. Germany
5. United Kingdom
6. Japan
7. India
8. France
9. Canada
10. Ukraine

Africa and South America have relatively low rates of CO_2 per capita.

China's CO_2 per capita rate is increasing proportionally by following the population trend line. Other major emitters (United States and India), are increasing at a non-proportional rate.

Russia's CO_2 per capita rate has been decreasing since 1991, which coincides with the dissolution of the Soviet Union. However, it was the third highest contributor in 2021.