PROJECT REPORT

A GLOBAL CO2 EMISSION ANALYSIS

1 INTRODUCTION

1.1 Overview

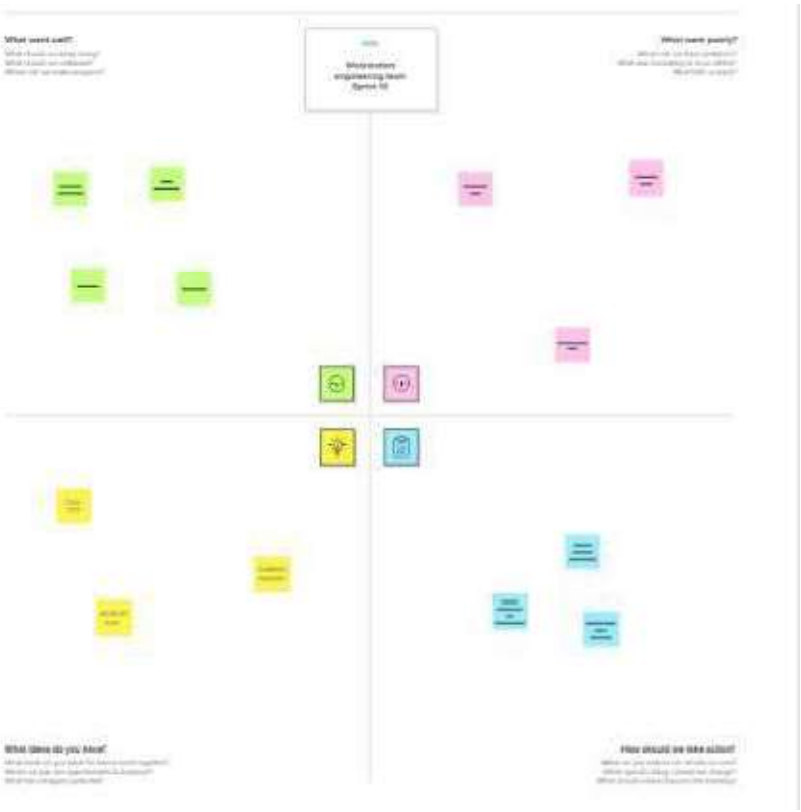
Global warming is one of the biggest challenges currently being faced by the human race, although correlation is not causation, a likely cause of global warming is due to increased atmospheric carbon dioxide from human activities. **CO2 Emission** refers to the Carbon Dioxide emitted throughout the world. For this analysis we will be focusing on CO2 Emissions and its effect on the world we live in as well as some key factors and stats that may play a role in the emission of CO2 globally. Fossil fuel use is the primary source of CO2. The data throws light onto how much fossil fuels are burnt, per year per nation, which amounts to an increase in CO2 every year. This will help researchers and environment experts to predict global warming. So countries should set a goal to decrease this amount yearly.
Analysing Global Co2 Emission across countries from 1975 to 2020. This dataset contains a record of Co2 Emission by each Country and Region of Earth, here we are going to analyses and visualizee Country wise, Region wise and Overall Co2 Emission on Earth.

1.1 Purpose

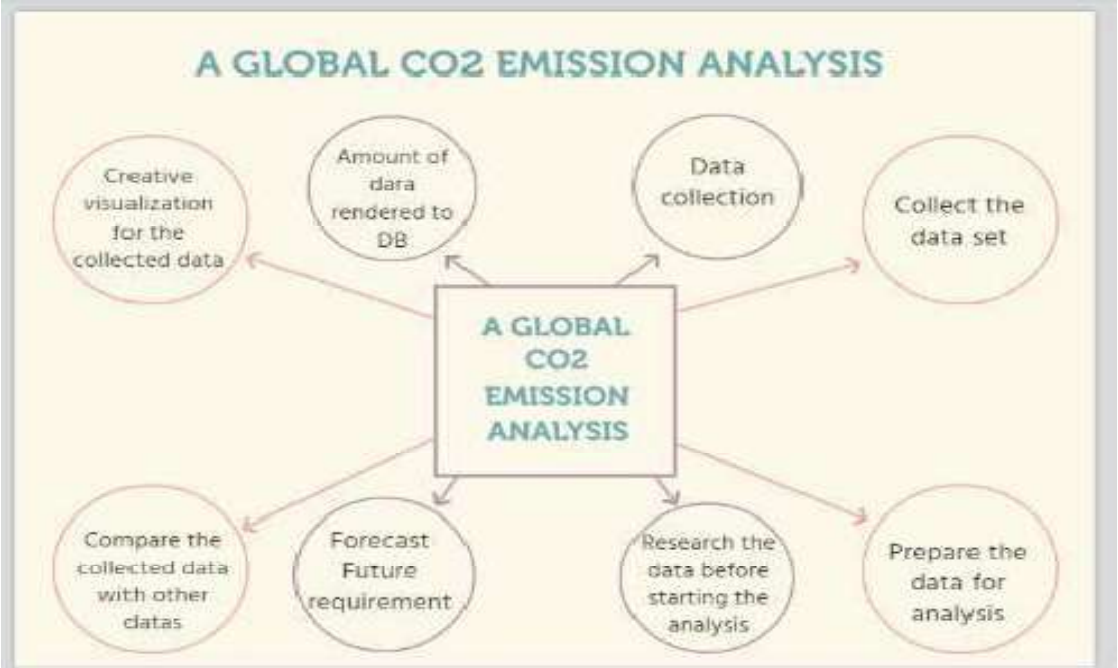
The carbon (and oxygen) in CO2 can be used as an alternative to fossil fuels in the production of chemicals, including plastics, fibres and synthetic rubber. As with CO2-derived fuels, converting CO2 to methanol and methane is the most technologically mature pathway. The methanol can be subsequently converted into other carbon containing high-value chemical intermediates such as olefins, which are used to manufacture plastics, and aromatics, which are used in a range of sectors including health and hygiene, food production and processing.
A special group of chemicals, polymers, are used in the production of plastics, foams and resins. The carbon in CO2 can be used in polymer production by replacing part of the fossil fuel-based raw material in the manufacturing process (Figure 6). Unlike the conversion of CO2 to fuels and chemical intermediates, polymer processing with CO2 requires little energy input, because CO2 is converted into a molecule with an even lower energy state (carbonate). A number of companies are currently operating polymer plants using CO2 as a raw material.

2 PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map



2.2 Ideation & Brainstorming map



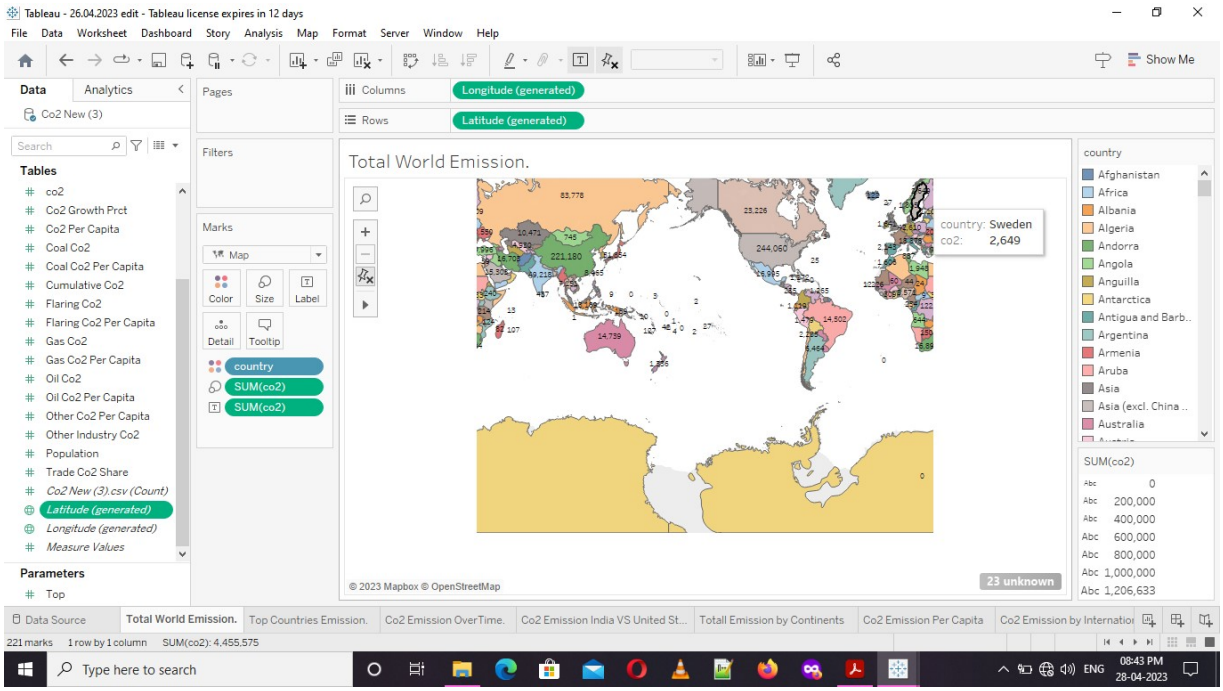
3 RESULT

3.1 Social Impact: Carbon dioxide emissions are the primary driver of global climate change. It's widely recognised that to avoid the worst impacts of climate change, the world needs to urgently reduce emissions.

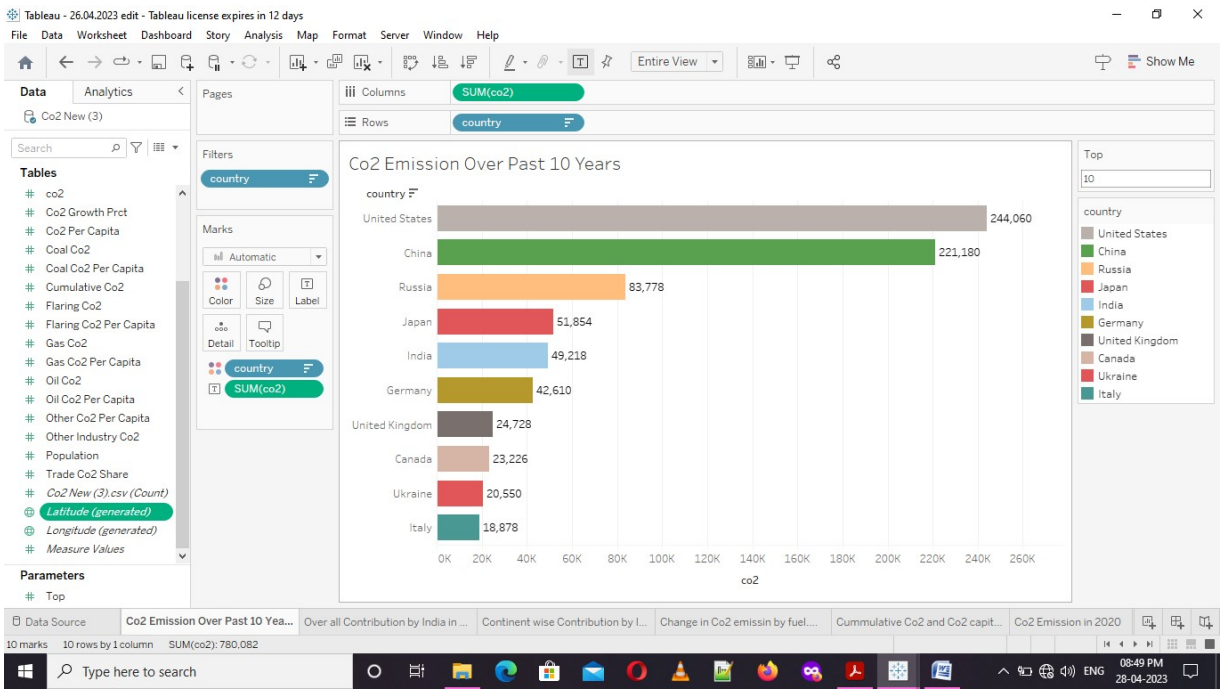
Business Model/Impact: By conducting an analysis the countries can identify areas for improvement and take steps to reduce factors that are responsible for Co2 Emission for environmental sustainability by improving the efficiency and transitioning to low carbon alternatives.

3.2 Activity & Screenshot

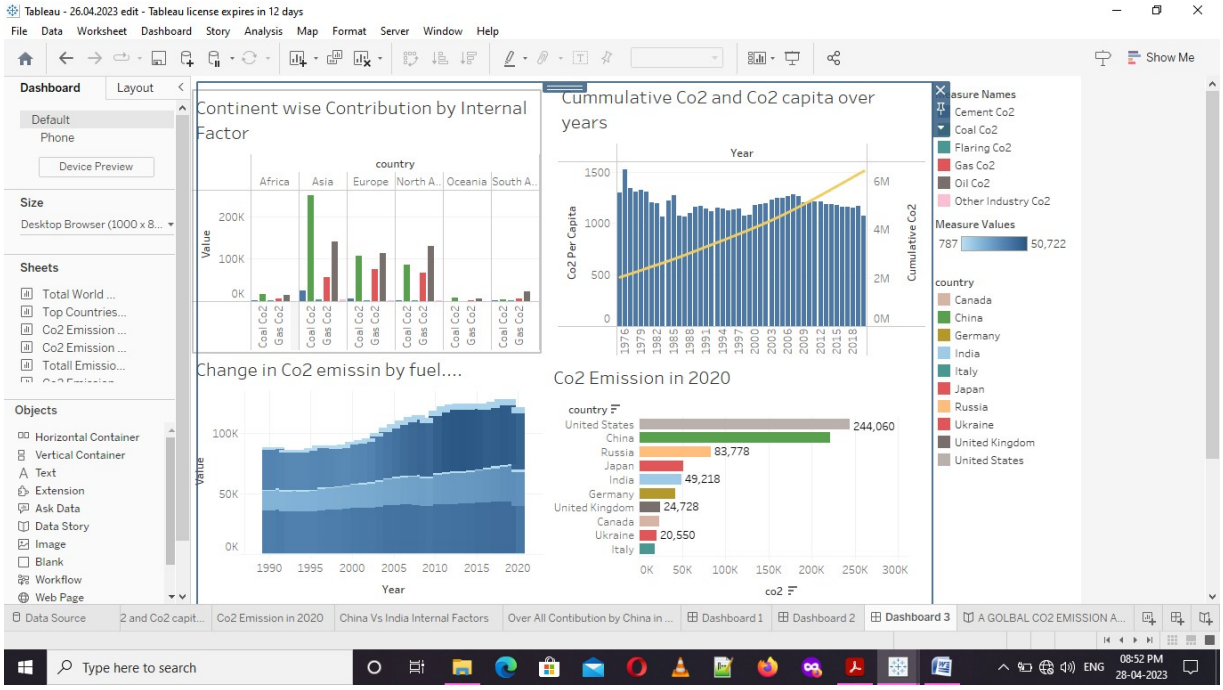
Sheet 1



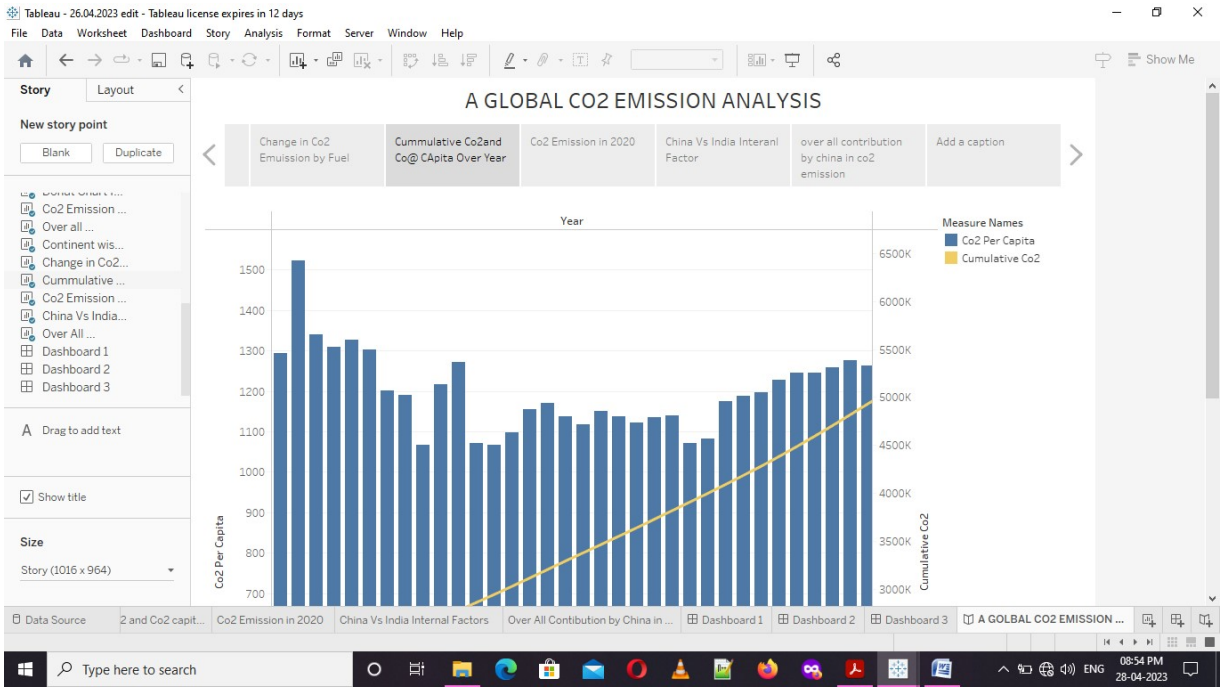
Sheet 14



Dashboard-3



Story



4 TEAM DETAILS

Team Lead: SNEHA M

Team Member 1- ASIN SENA M

Team Member 2- ANGALESH DEVI

Team Member 3- RISHWANA YASHMINE M

5 ADVANTAGES & DISADVANTAGES

ADVANTAGES

Green plants grow faster with more CO2. Many also become more drought resistant because higher CO2 levels allow plants to use water more efficiently. More abundant vegetation from increased CO2 is already apparent.

DISADVANTAGES

High carbon dioxide levels can cause poor air quality and can even extinguish pilot lights on gas-powered appliances.

6 APPLICATIONS

The carbon in CO2 can be used to produce fuels that are in use today, including Methane, methanol, gasoline and aviation fuels.

7 CONCLUSION

We conclude from this project the rising level of atmospheric CO2 could be the one global natural resource that is progressively increasing food production and total biological output, in a world of otherwise diminishing natural resources of land, water, energy, minerals, and fertilizer.

8 FUTURE SCOPE

The carbon (and oxygen) in CO2 can be used as an alternative to fossil fuels in the production of chemicals, including plastics, fibres and synthetic rubber. As withCO2-derived fuels, converting CO2 to methanol and methane is the most technologically mature pathway.

APPENDIX

SOURCE CODE- DASHBOARD

https://public.tableau.com/views/AGlobalCo2EmissionAnalysis/Dashboard1?:language=en-GB&:display_count=n&:origin=viz_share_link

SOURCE CODE – STORY

https://public.tableau.com/views/COSTORY/AGOLBALCO2EMISSIONANALYSIS?:language=en-GB&:display_count=n&:origin=viz_share_link