

# **PROJECT REPORT**

## **Unearthing the Environmental Impact of Human Activity:**

### **A Global CO<sub>2</sub> 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. Fossil fuel use is the primary source of CO<sub>2</sub>.

##### **1.2 PURPOSE:**

The project throws light onto how much fossil fuels are burnt, per year per nation, which amounts to an increase in CO<sub>2</sub> every year. This will help researchers and environment experts to predict global warming. So countries should set a goal to decrease this amount yearly.

#### **2.PROBLEM DEFINITION & DESIGN THINKING**

##### **2.1 EMPATHY MAP**

**Template**

**Build empathy**  
The information you add here should be representative of the observations and research you've done about your users.

**Says**  
What have we heard them say?  
What can we imagine them saying?

- High concentration leads to health issues
- Affects the vegetation, soil and fossil fuels
- Pollution

**Does**  
What behavior have we observed?  
What can we imagine them doing?

- Tree planting and Forest restoration
- Mandatory and Subsidized insulation of buildings
- Making public transport widely available

**Thinks**  
What are their wants, needs, hopes, and dreams? What other thoughts might influence their behavior?

- Is CO<sub>2</sub> emission harmful to people?
- Is India is the largest emitter of CO<sub>2</sub>?
- Mainly comes from transportation
- Where does CO<sub>2</sub> come from?

**Feels**  
What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?

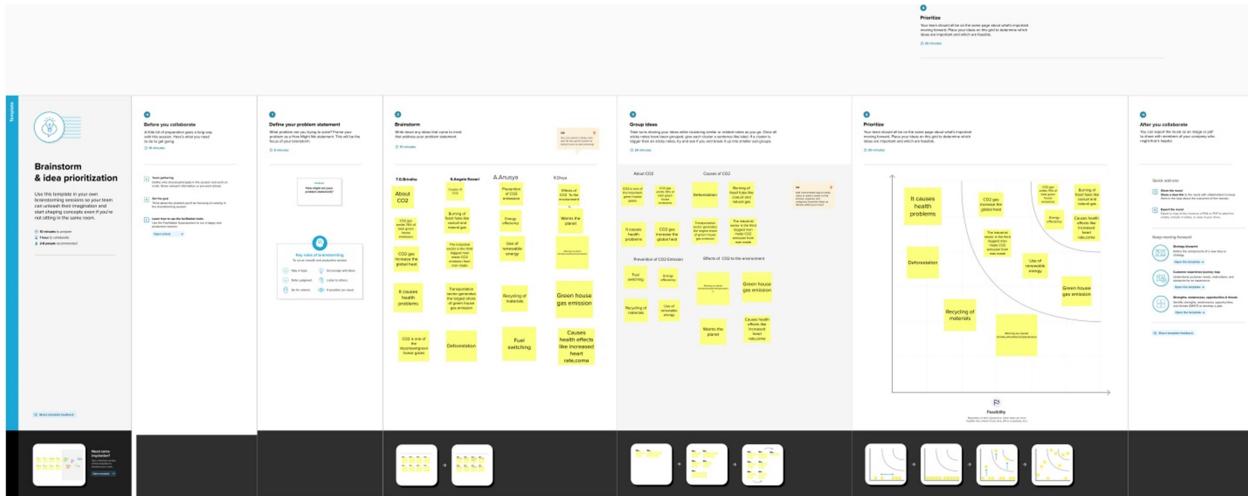
- Why does CO<sub>2</sub> get more attention than other gases?
- Respiratory issues
- Anxiety, Depression, Hopelessness

**Share template feedback**

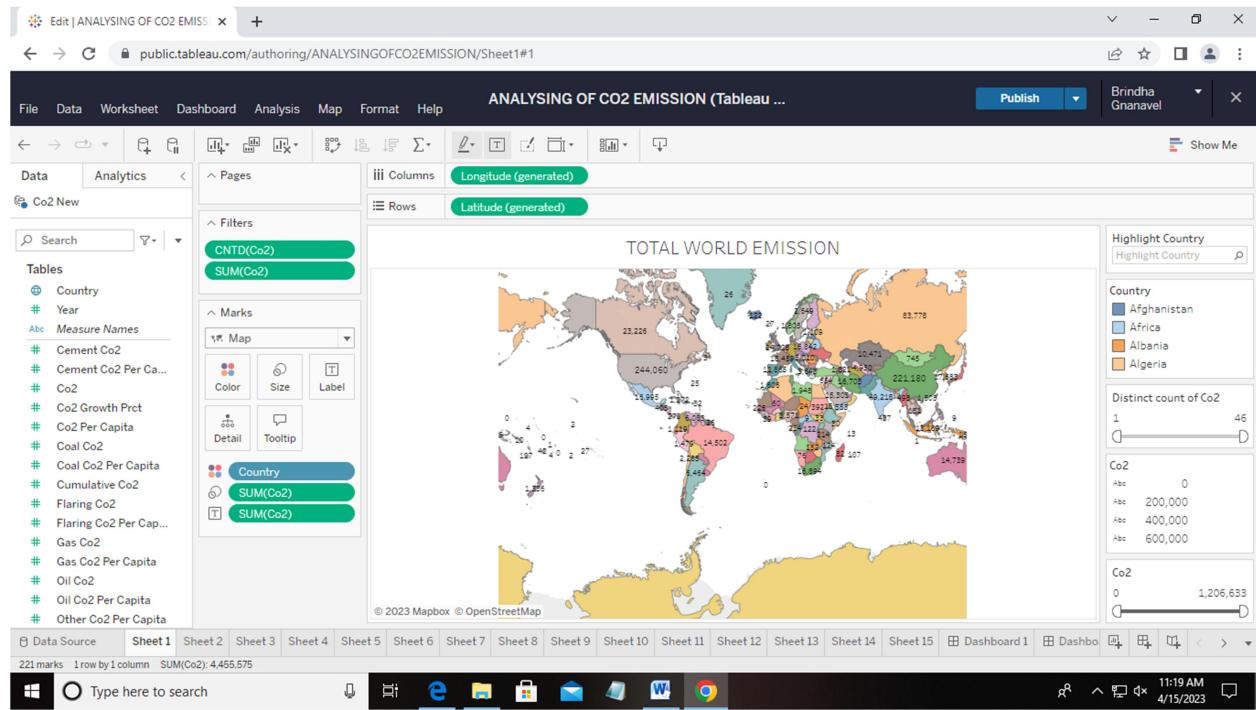
**Need some inspiration?**  
See a finished version of this template to kickstart your work.  
[Open example →](#)

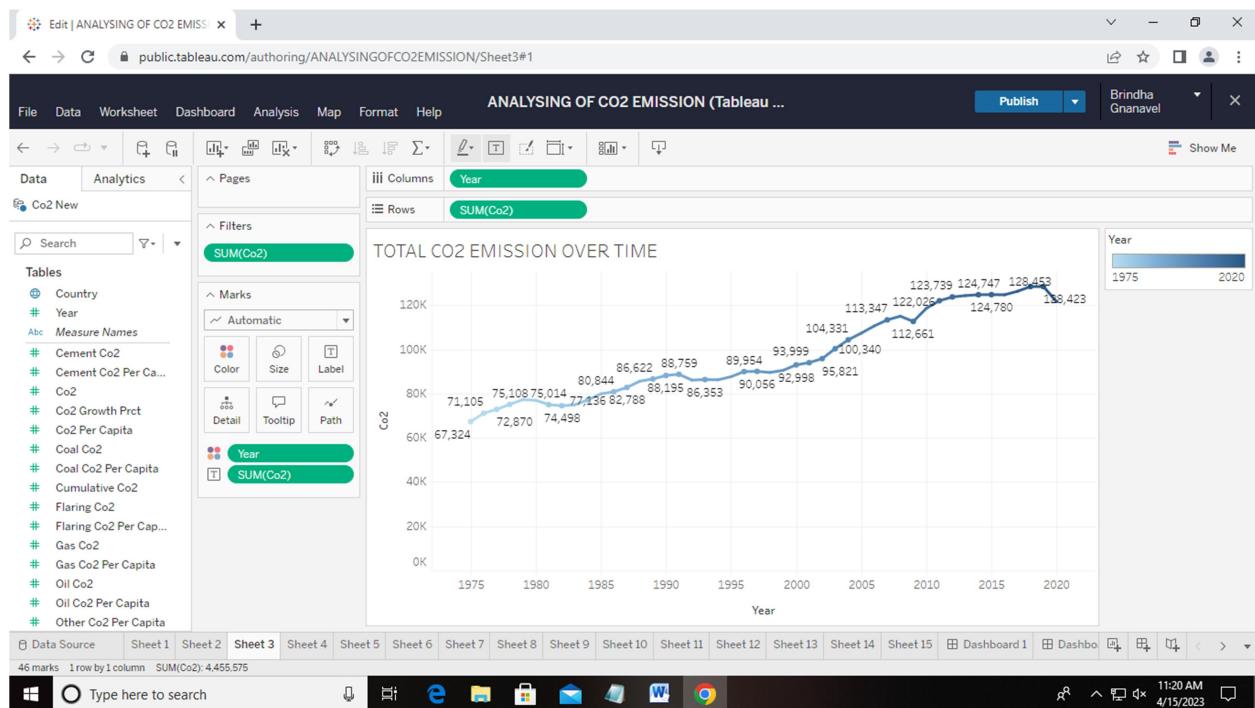
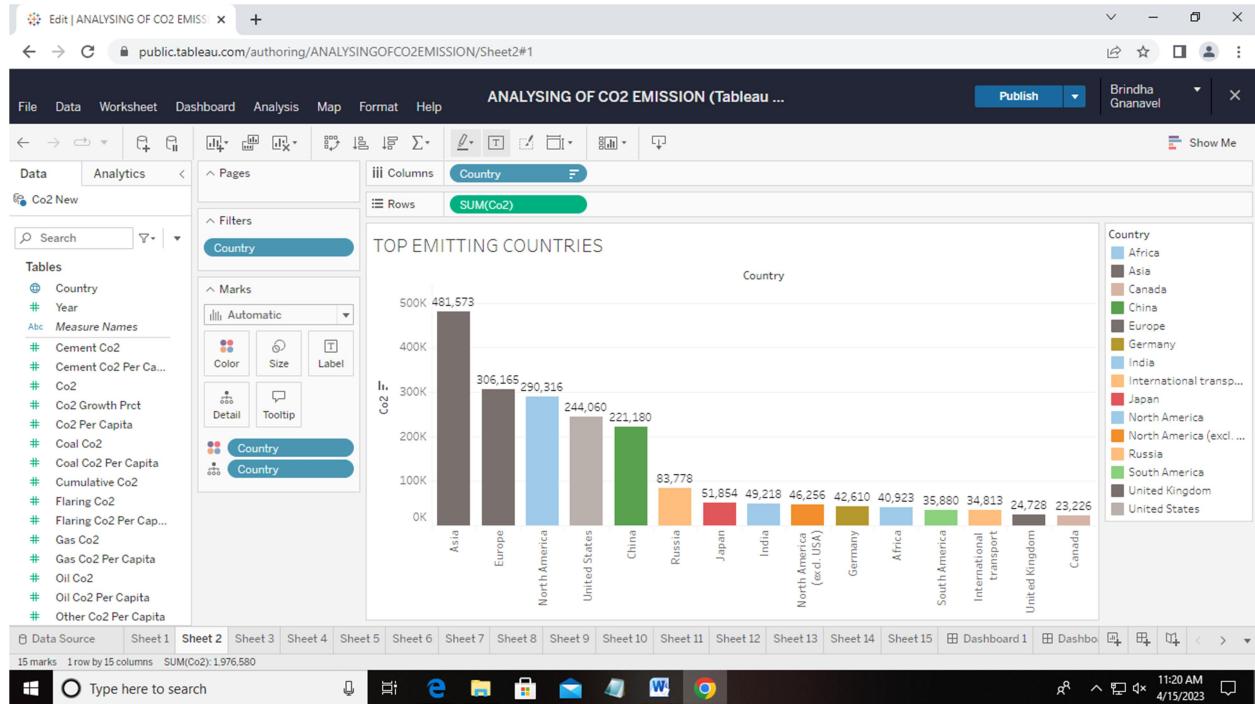


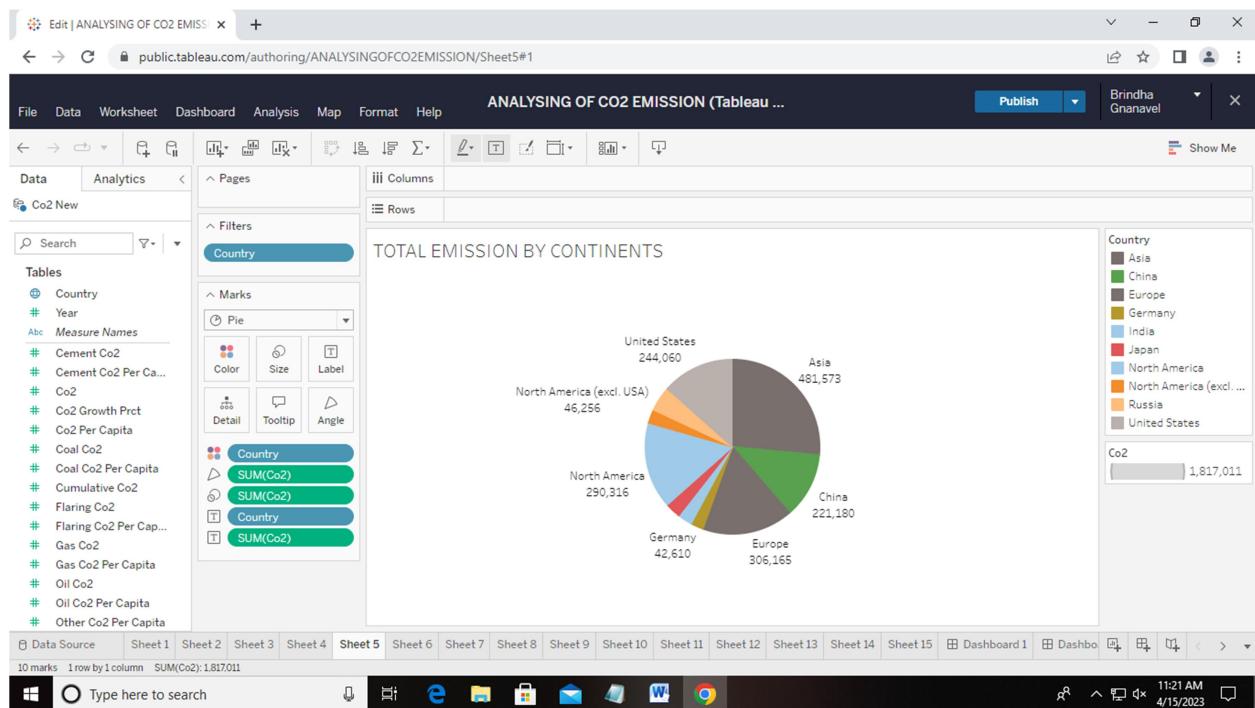
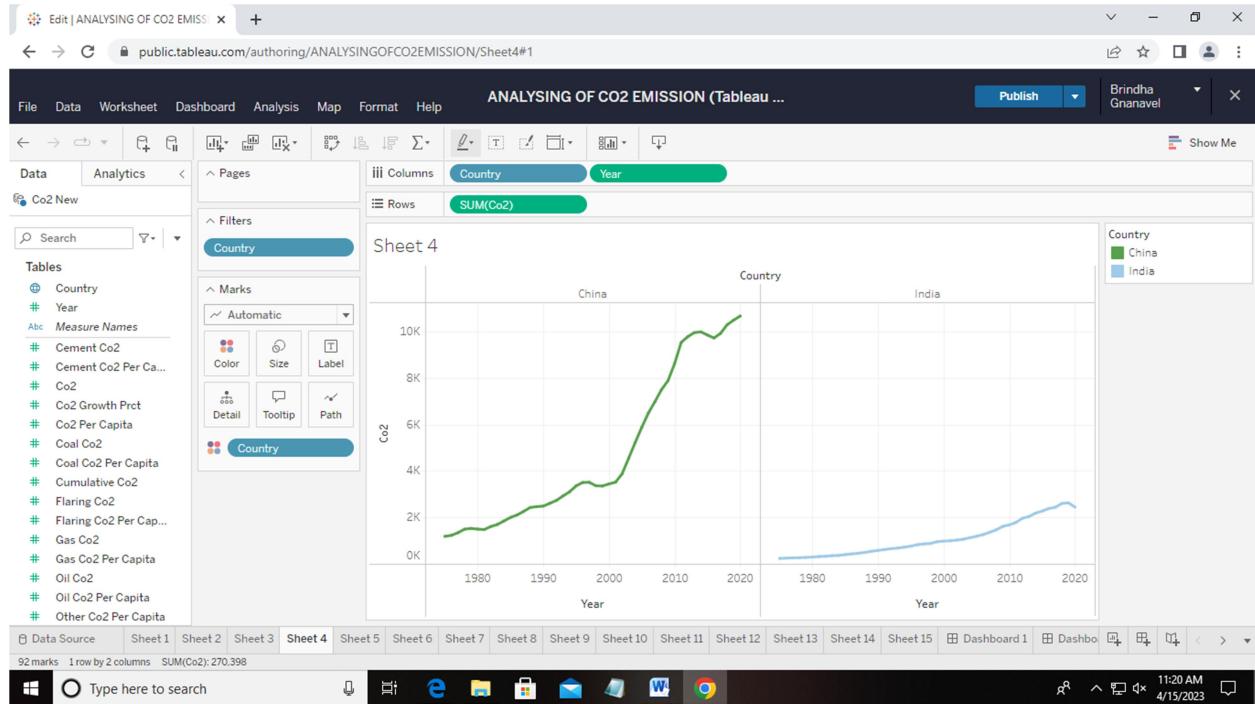
## **2.2 IDEATION& BRAINSTOMING**

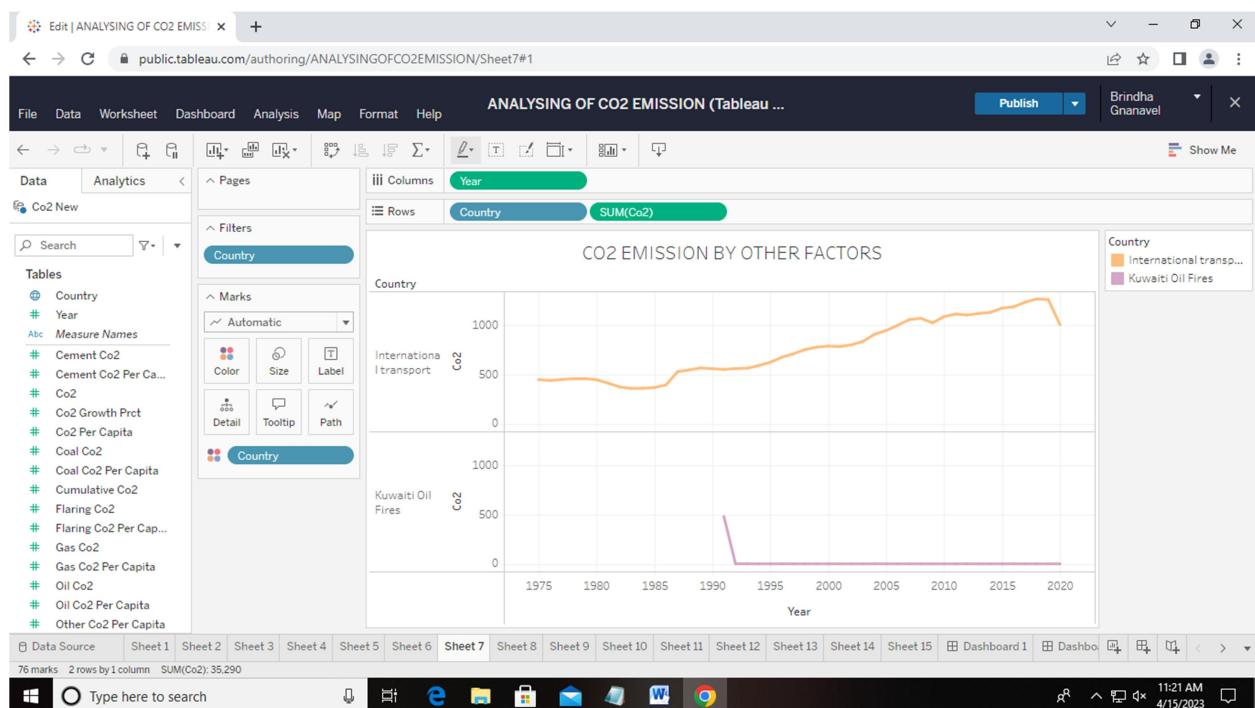
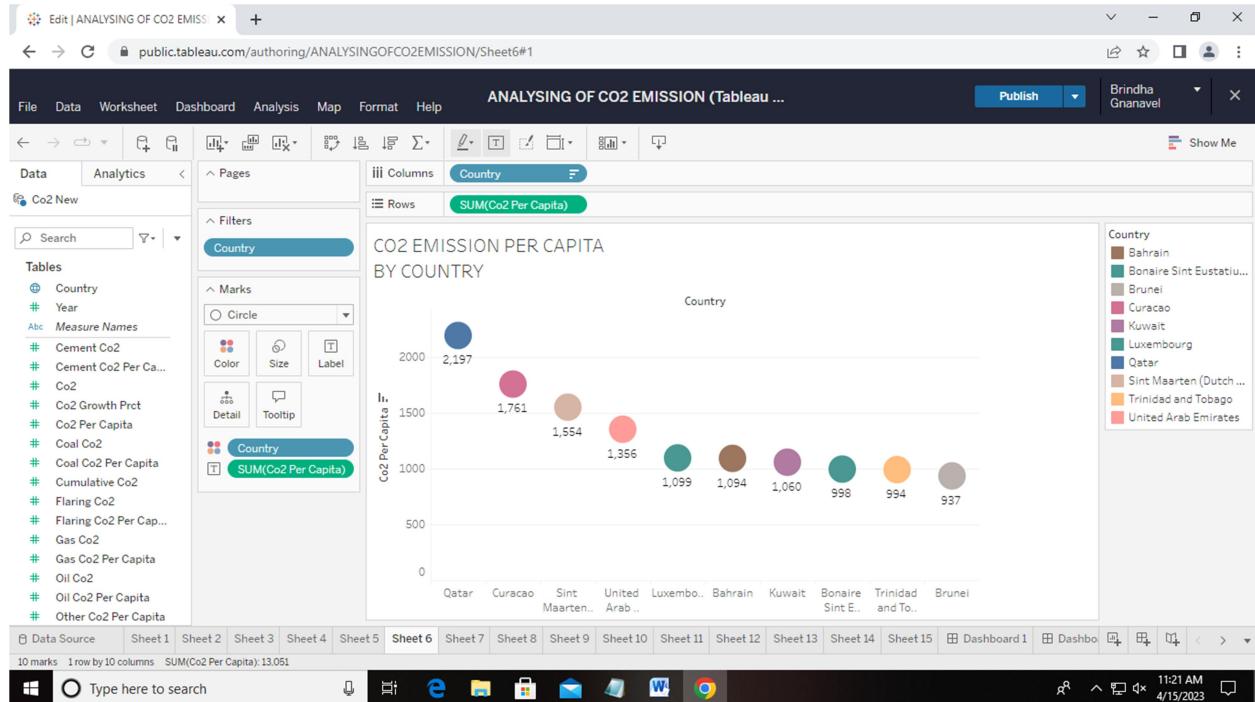


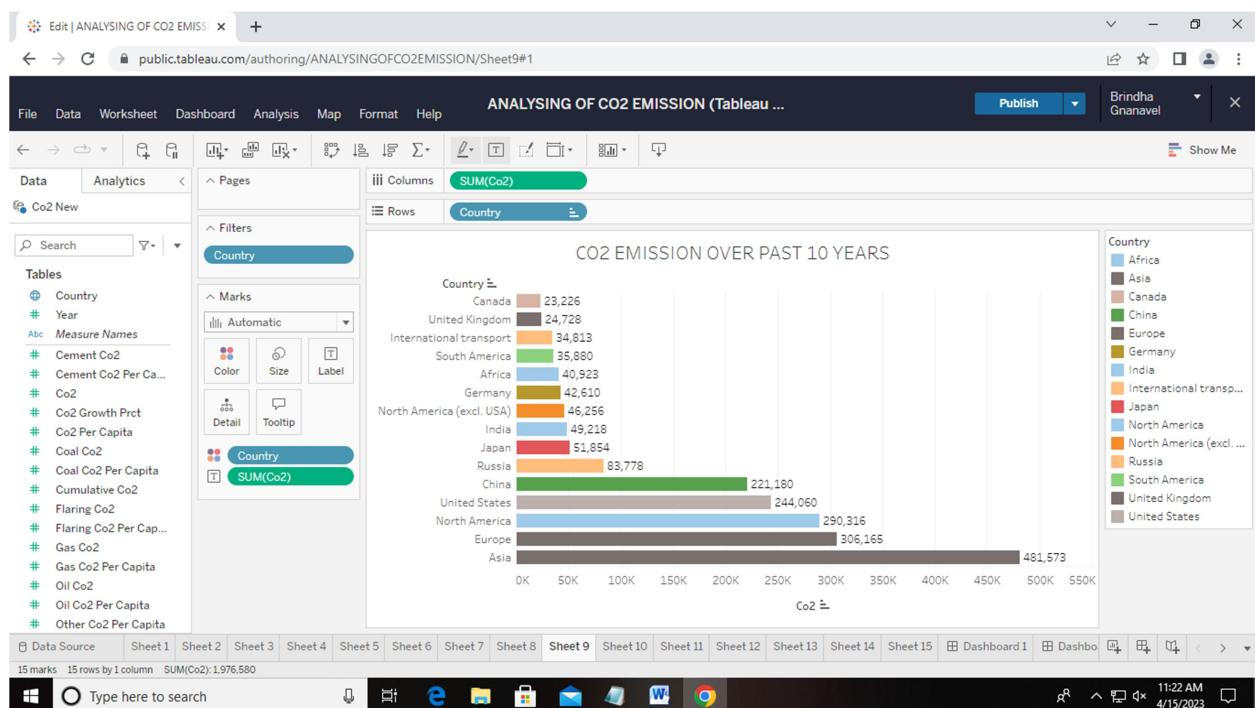
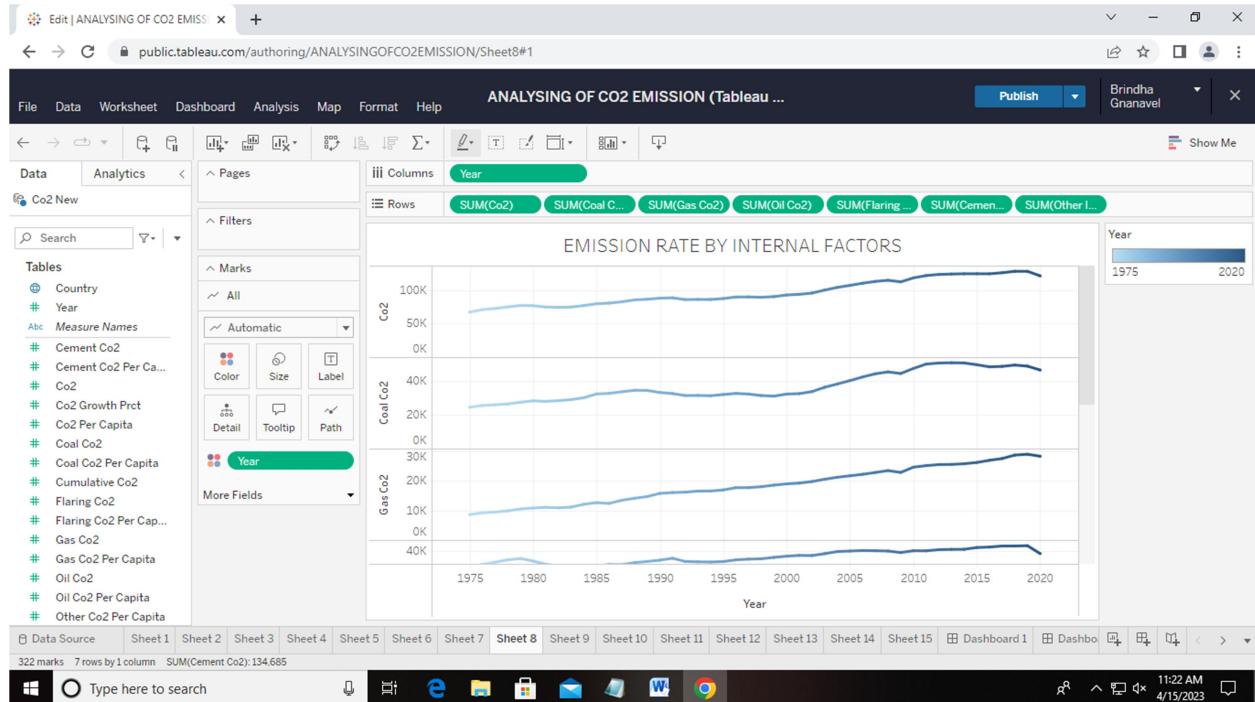
### **3. RESULT:**

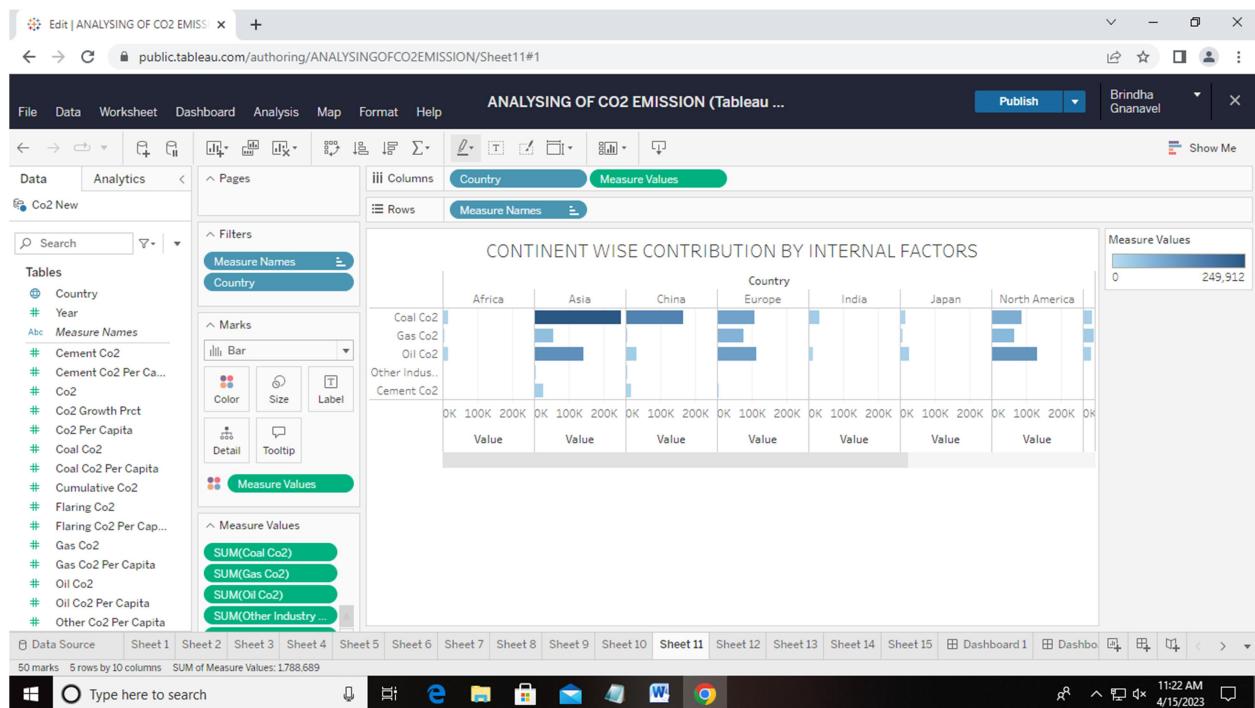
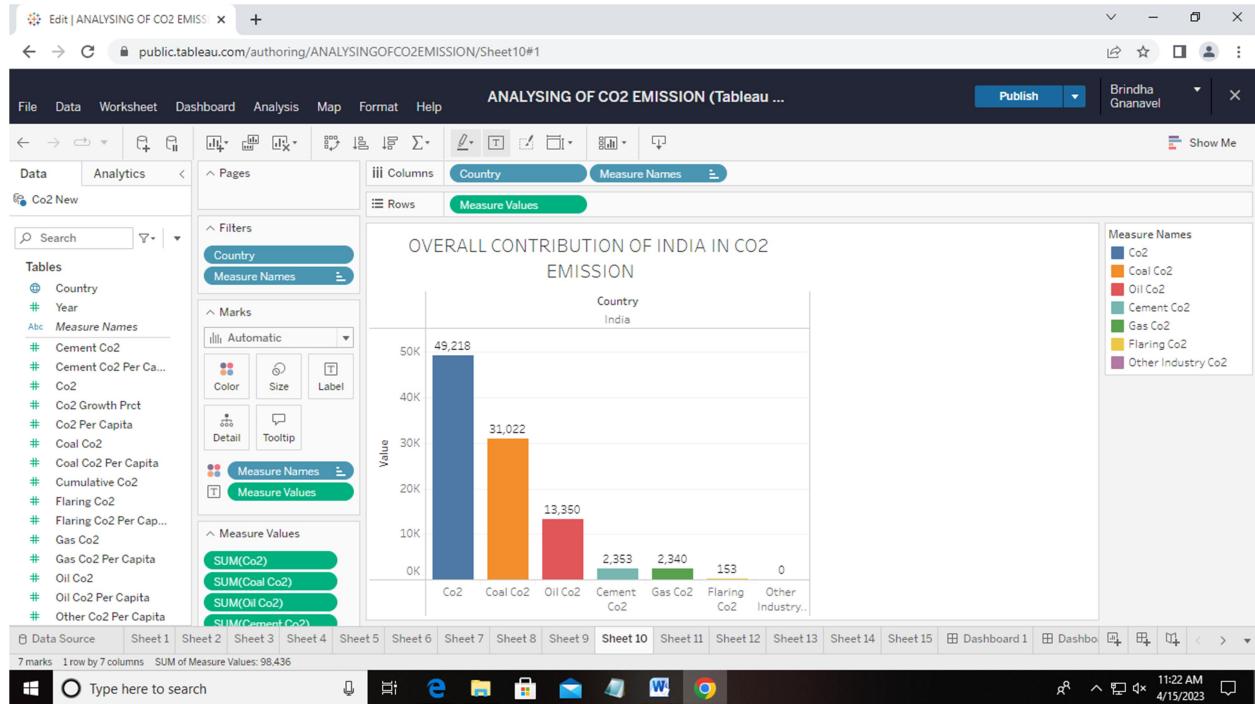


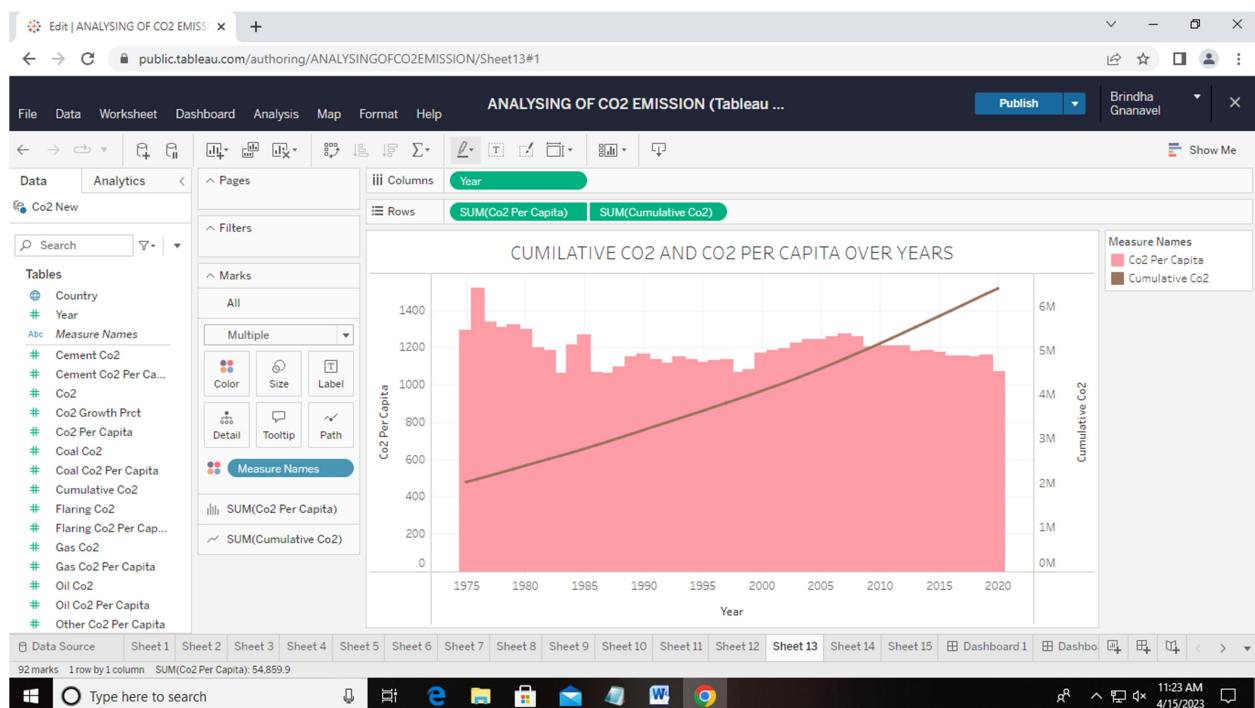
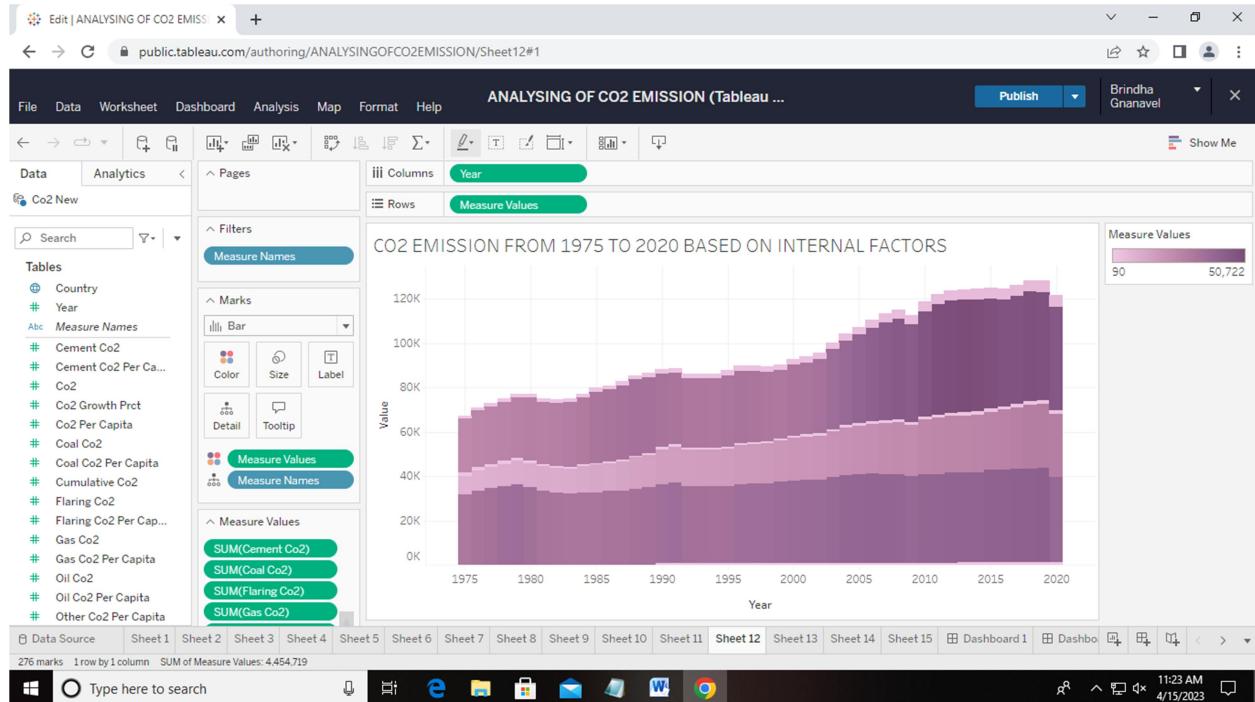


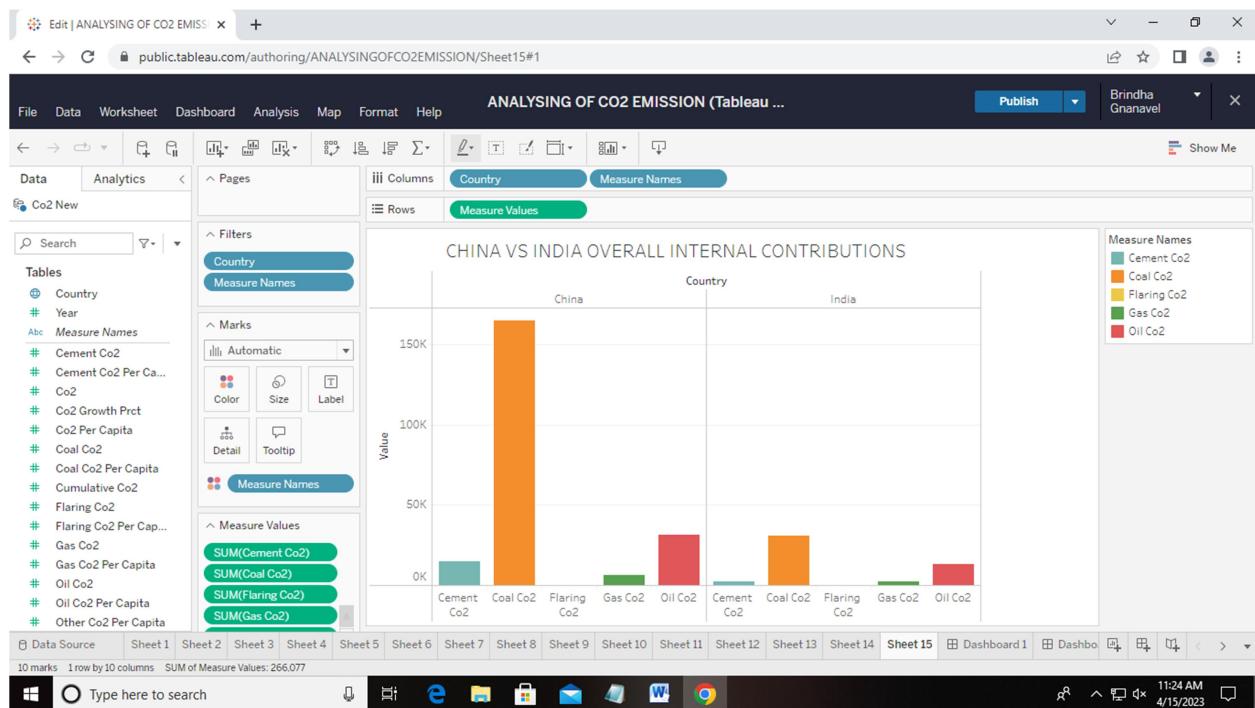
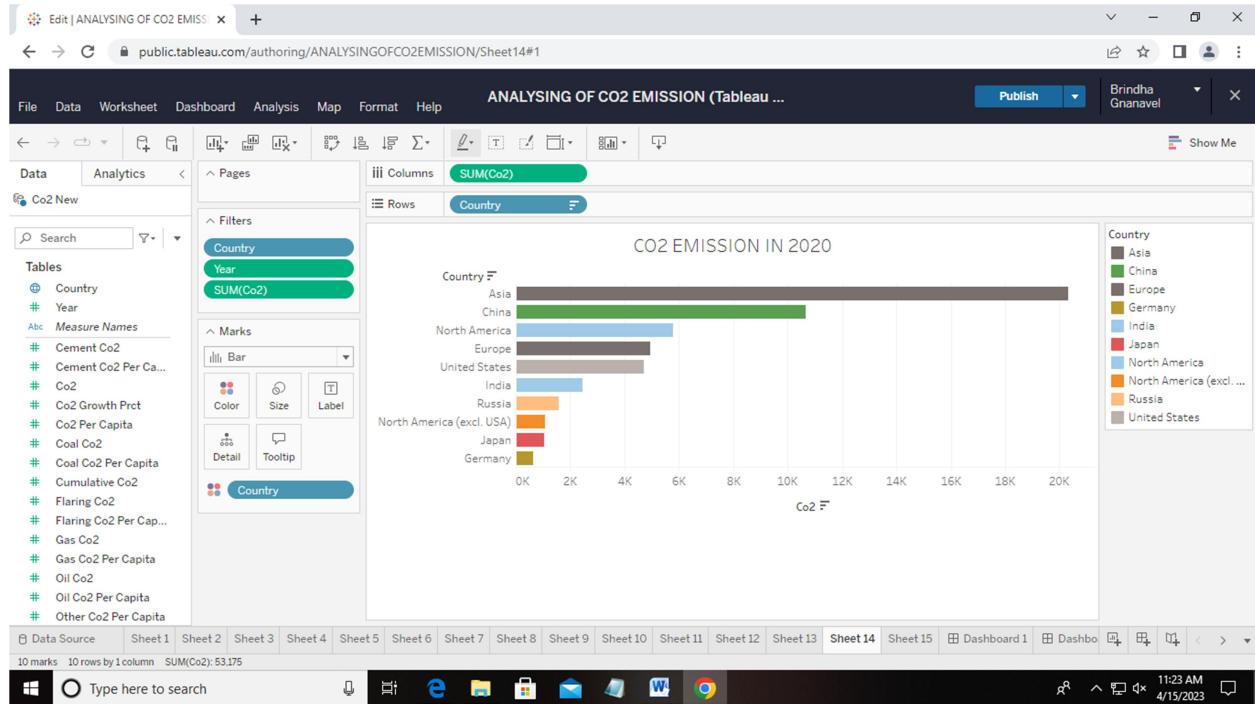


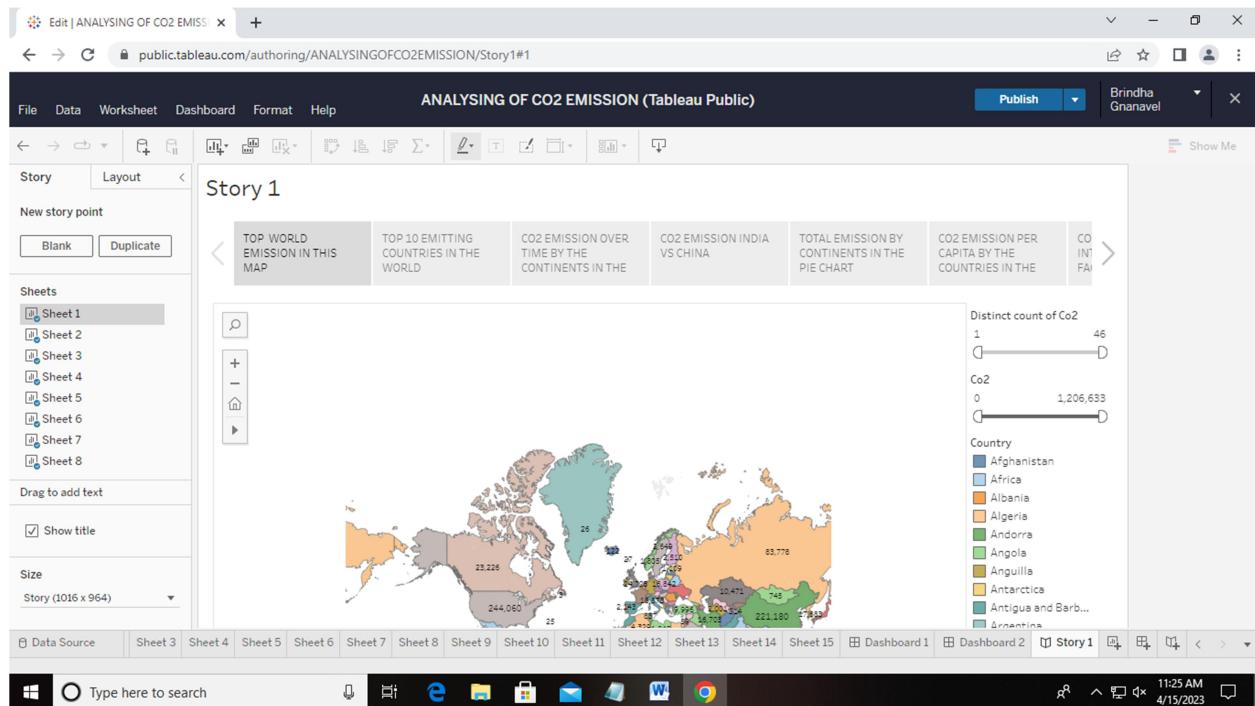
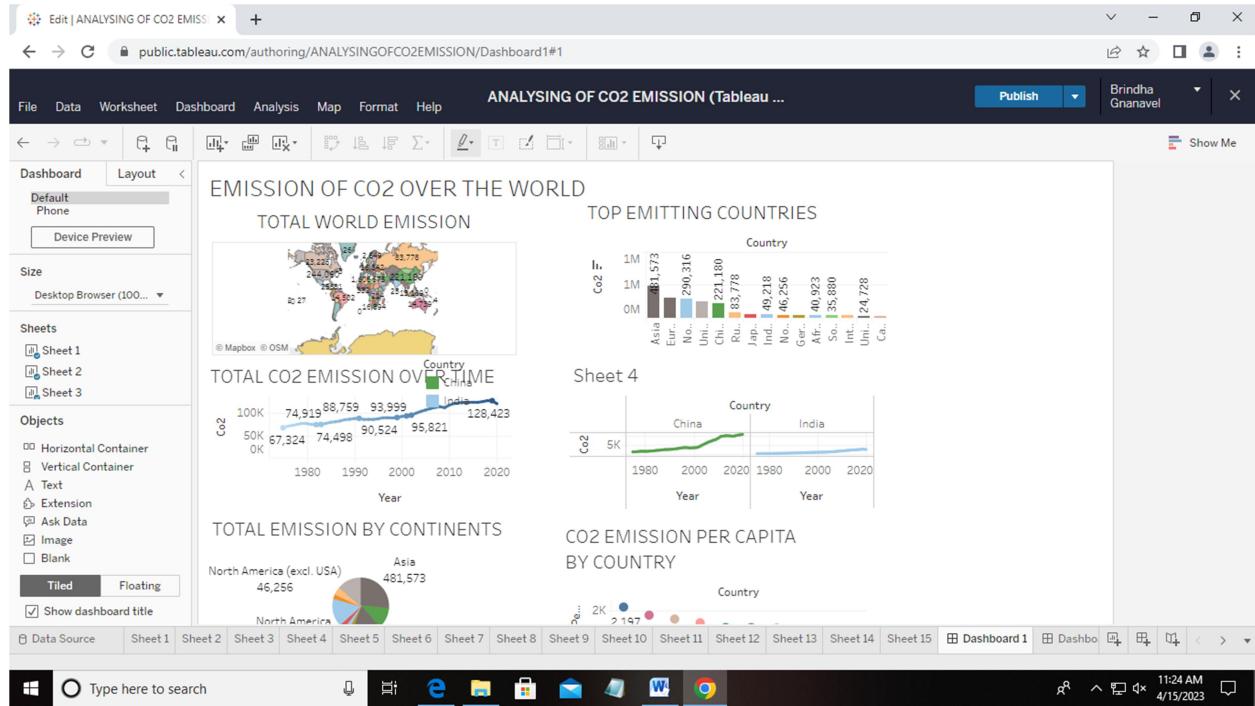












## 4. ADVANTAGES & DISADVANTAGES

**ADVANTAGE:** To know how to reduce CO<sub>2</sub> emitting techniques

These chemical and biological conversion processes are attracting increasing interest from governments, industry and investors, but most are still in their infancy and face commercial and regulatory challenges.

**Advantage:** The production of CO<sub>2</sub>-based fuels and chemicals is energy-intensive and requires large amounts of hydrogen.

The carbon in CO<sub>2</sub> enables the conversion of hydrogen into a fuel that is easier to handle and use, for example as an aviation fuel. CO<sub>2</sub> can also replace fossil fuels as a raw material in chemicals and polymers. Less energy-intensive pathways include reacting CO<sub>2</sub> with minerals or waste streams, such as iron slag, to form carbonates for building materials.

**DISADVANTAGE:** Carbondioxide can be toxic and harmful to humans

Increasing the percentage of Carbondioxide in the air causes suffocation of living organisms as well as global warming that threatens the existence of life on this planet, a high concentration of Carbondioxide causes narcosis.

**DISADVANTAGE:** It can cause global climate change

Carbon emissions affect the planet significantly, as they are the greenhouse gas with the highest levels of emissions in the atmosphere. This, of course, causes global warming and ultimately, climate change.

## 6. CONCLUSION

- Reduce air travel. ...
  - Make your driving more efficient. ...
  - Plant trees. ...
  - Switch to clean energy. ...
  - Eat less red meat. ...
  - Make your home more energy-efficient.
- 
- **Reduce wildfires.** Wildfires and carbon emissions are part of a harmful cycle. Wildfires emit dangerous amounts of carbon emissions, and rising carbon emissions cause extreme weather conditions like heat waves, which often contribute to wildfires. Reducing our emissions can relieve some of the burdens from forest and land management, emergency responders, and fire departments worldwide.

- **Make your driving more efficient.** While living a car-free lifestyle may not be possible for everybody, try substituting car trips with bike rides, bus trips, train rides, or other forms of public transportation. When you drive, cut back on fossil fuel emissions by accelerating slowly and using the air conditioning sparingly. Check your tire pressure for better fuel economy, carpool when possible, and consider purchasing a hybrid or electric vehicle if you want a new car.
- **Plant trees.** Deforestation is one of the significant causes of carbon emissions. Trees absorb and store the carbon dioxide in the atmosphere, but they can no longer absorb carbon once they are cut down. Planting trees is among the most inexpensive, natural ways to take climate action and reduce our negative environmental impact.
- **Switch to clean energy.** Clean energy is another way to help reduce carbon emissions. Solar panels, wind turbines, and geothermal energy are all energy sources with a higher level of sustainability, produce low carbon emissions, and lower our dependence on natural gas and resource harvesting.
- **Eat less red meat.** Over 220 grams of carbon dioxide are produced for every gram of beef produced, resulting in almost four percent of the total GHG emissions. Eating vegetarian more often or consuming less beef can lower the amount of carbon present in our atmosphere.
- **Make your home more energy-efficient.** If you live in a state that allows you to choose your energy supplier, the first thing you should do is look for a supplier that uses renewable sources. For instance, a coal-fired power plant burns fossil fuel and is more harmful to the environment than wind power or solar power. Ensure your home is adequately insulated and that doors and windows are sealed with weather stripping to prevent cooled and heated air from escaping. Lastly, reduce energy use in your everyday life: Buy appliances that meet United States energy efficiency standards, use your thermostat to regulate temperatures and try to use your air conditioning infrequently, turn off all lights and appliances when you're not using them, and replace old lights with LED light bulbs that use less energy.

## 7. FUTURE SCOPE:

**From this study we can learn or have an idea about what is co<sub>2</sub> emission and how it is affect our planet and how can we reduce them, in this we can create very sustainable method to reduce them and there is very big range of scope in this in future.**