

WELCOME



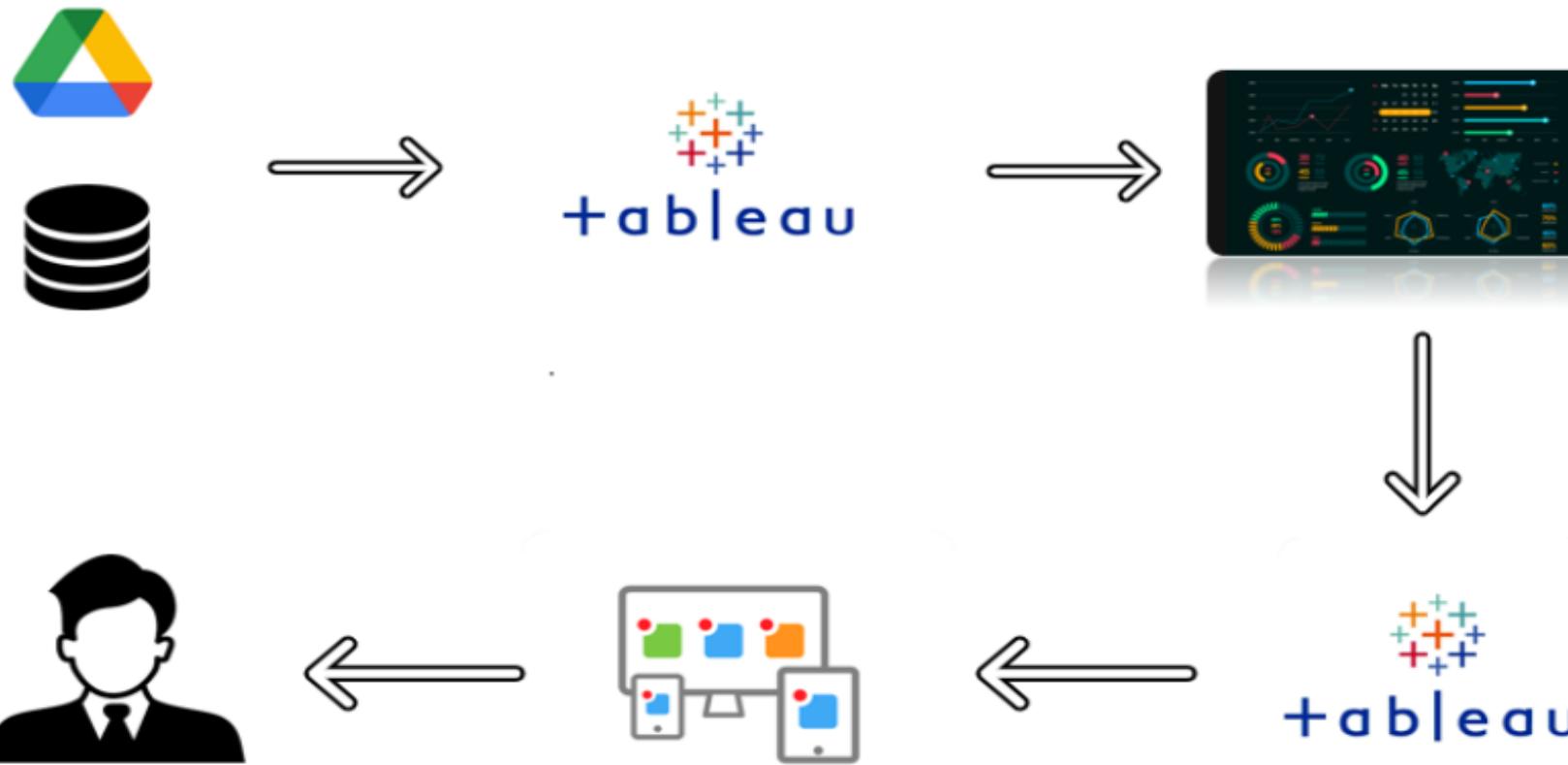


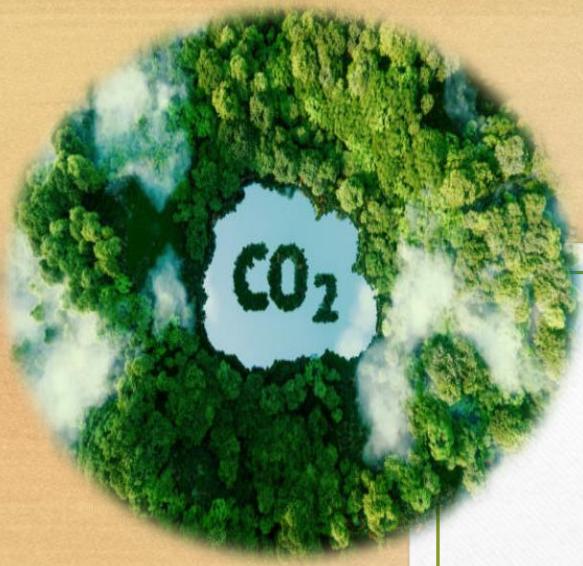
**SMARTBRIDGE**  
Let's Bridge the Gap



**Smart  
Internz**

## Technical Architecture:





# UNEARTHING THE ENVIRONMENTAL IMPACT OF HUMAN ACTIVITY

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## A GLOBAL CO2 EMISSION ANALYSIS

# **TEAM MEMBERS**

**Team leader : P. Madhumitha**

**Team Members : C. Mahalakshmi**

**A. Kaviya**

**S. Saranya**

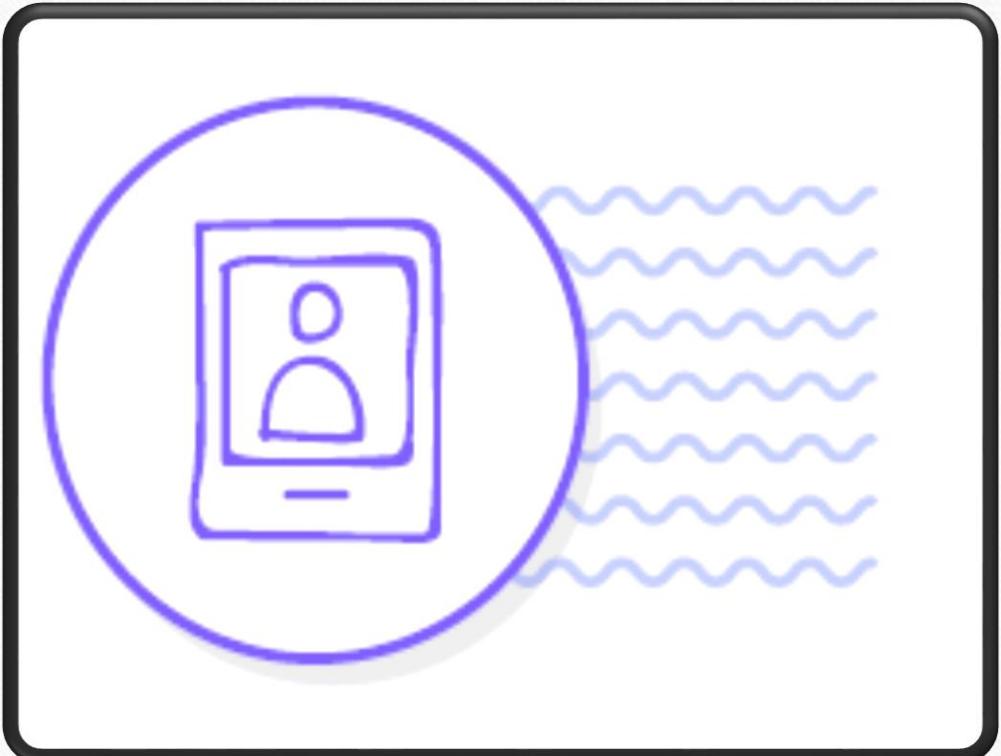
# INTRODUCTION

## 1.1 OVERVIEW

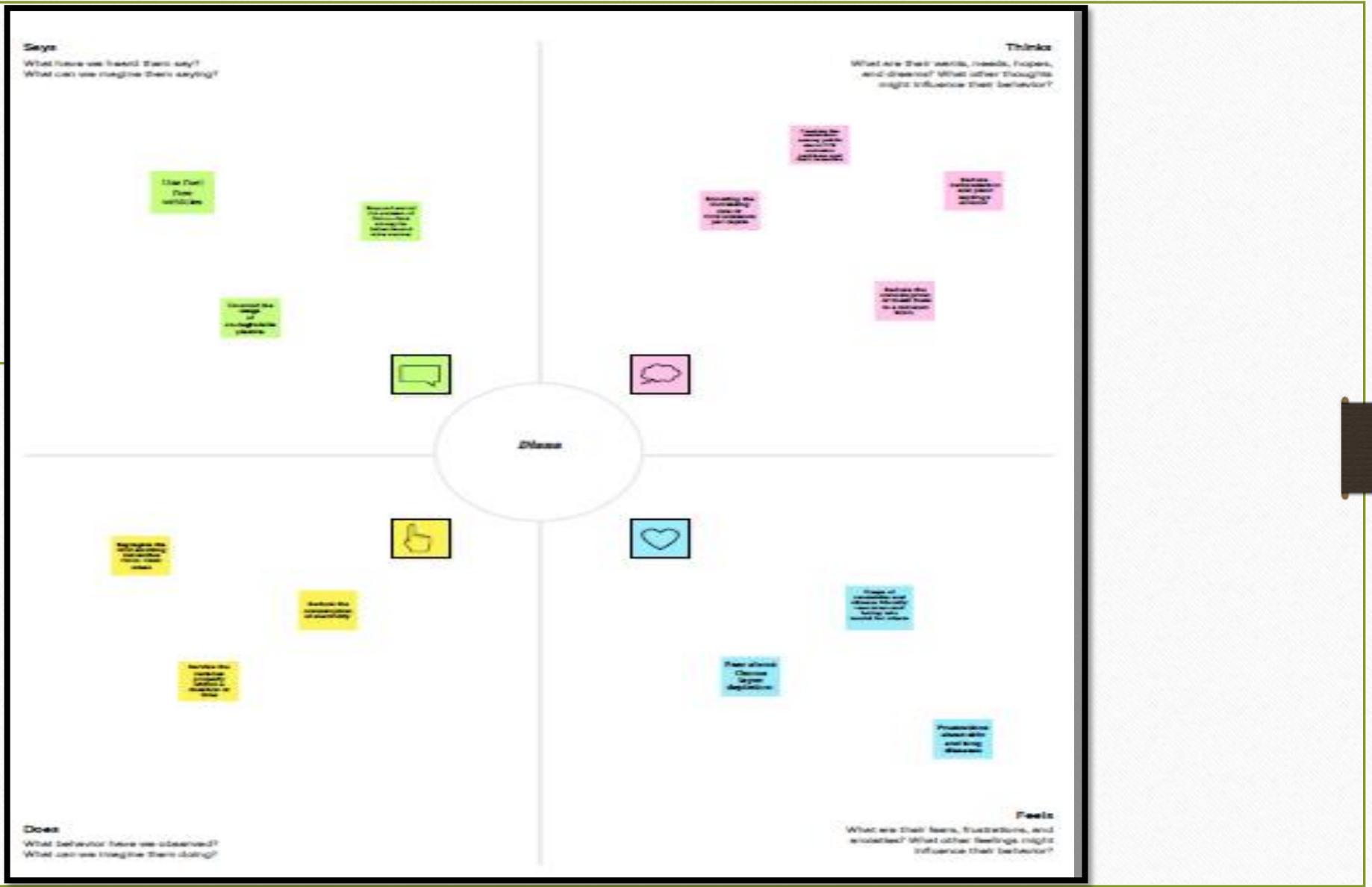
- Carbon di oxide (Co2) is the primary as well as toxic factor for the gradual increase of global warming .Our earth lost its 2/4<sup>th</sup> of its nature beauty due to the increase of Co2 in the atmosphere.
- Through our project we demonstrate the Co2 emitting factors and the usage of Co2 by the continents as well as countries from the year of 1975 – 2020.
- By creating elegant dashboards ,story, visualizations through tableau desktop ,we have given an accurate point of view of the Global Co2 emission analysis .

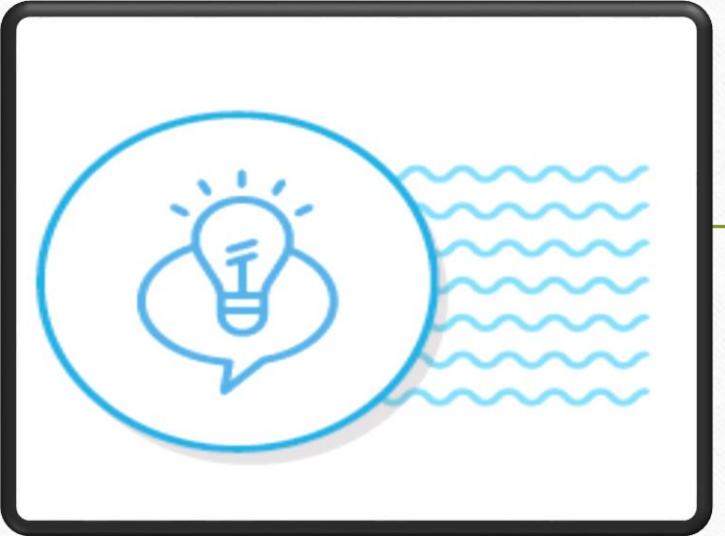
## **1.2 AIM OF CO<sub>2</sub> EMISSION ANALYSIS**

- To make clear view of the increase in Co<sub>2</sub> emission all over the world .
- Through this project report we can make the **accurate decision** regarding Which is the largest emitting factor of Co<sub>2</sub> ? and Which country is in top leading position ?
- To **create awareness among the countries** which is emitting more amount of Co<sub>2</sub> in the atmosphere and make them to ensure the usage of low Co<sub>2</sub> emitting factors.



## 2.1 EMPATHY MAP





# Ideation and Brainstorming map

1

## Define your problem statement

### PROBLEM

- Increase in Transportation
- Enhancing the usage of fossil fuels
- Increase in industries
- Mass production and usage and burning  
of plastics
- Deforestation

2

## Brainstorm

P.Madhumitha

Decrease the usage of transportation with high emissions of CO<sub>2</sub>

Limit the mass production and usage of plastics

Reduce the usage of fossil fuels

Limit the release of air pollutants smoke from industries

Reduce the greenhouse gas emission globally

Practice carbon capture & storage technology

Switch to renewable resources

Provide necessary safety equipments for employee working under CO<sub>2</sub> emitting sectors

Practice afforestation

## A.Kaviya

Avoid heavy chemicals and petroleum based fertilizers in Agriculture

Reduced Air travel

Use biodegradable bags for purchasing

Incorporate walking and cycling for short trip destinations.

# S.Saranya

Ban the usage  
of  
undegradable  
plastics

Dwindle  
the consumptio  
n of electricity

Decrease the  
methane  
emissions from  
livestock in  
agriculture  
sector

Plant and  
save trees  
as much as  
possible

## C.Mahalakshmi

Shrink the usages of nuclear weapons & bombs

Tune up the vehicle's engine and parts in a certain period of time

Look for energy star label while buying new appliances like refrigerators, air conditioners etc.,

Companies can set CO<sub>2</sub> emission goals & take steps to reduce emission from industrial process

Purchase carbon offsets to start up low carbon technologies

Initiate awareness campaign through public rally and social media about CO<sub>2</sub> emission problems and solutions .

3

## Group ideas

### Initiating Awareness

- Limit the usage of all pollutants aside from industries
- Conserve resources through recycling and reuse instead of buying new products and solutions
- Use reusable bags for purchasing



### TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.



### Control measures in agriculture sector:

- Avoid heavy chemicals and petroleum based fertilizers in Agriculture



- Reduce the usage of fossil fuels



- Decrease the methane emissions from livestock in agriculture sector

### safety precautions:

- Purchase carbon offsets to start up for climate technologies
- Provide necessary safety equipments for employees during climate change working hours
- Reduce the greenhouse gas emission globally
- Plant and serve trees



### Ways to control CO2 emissions globally:

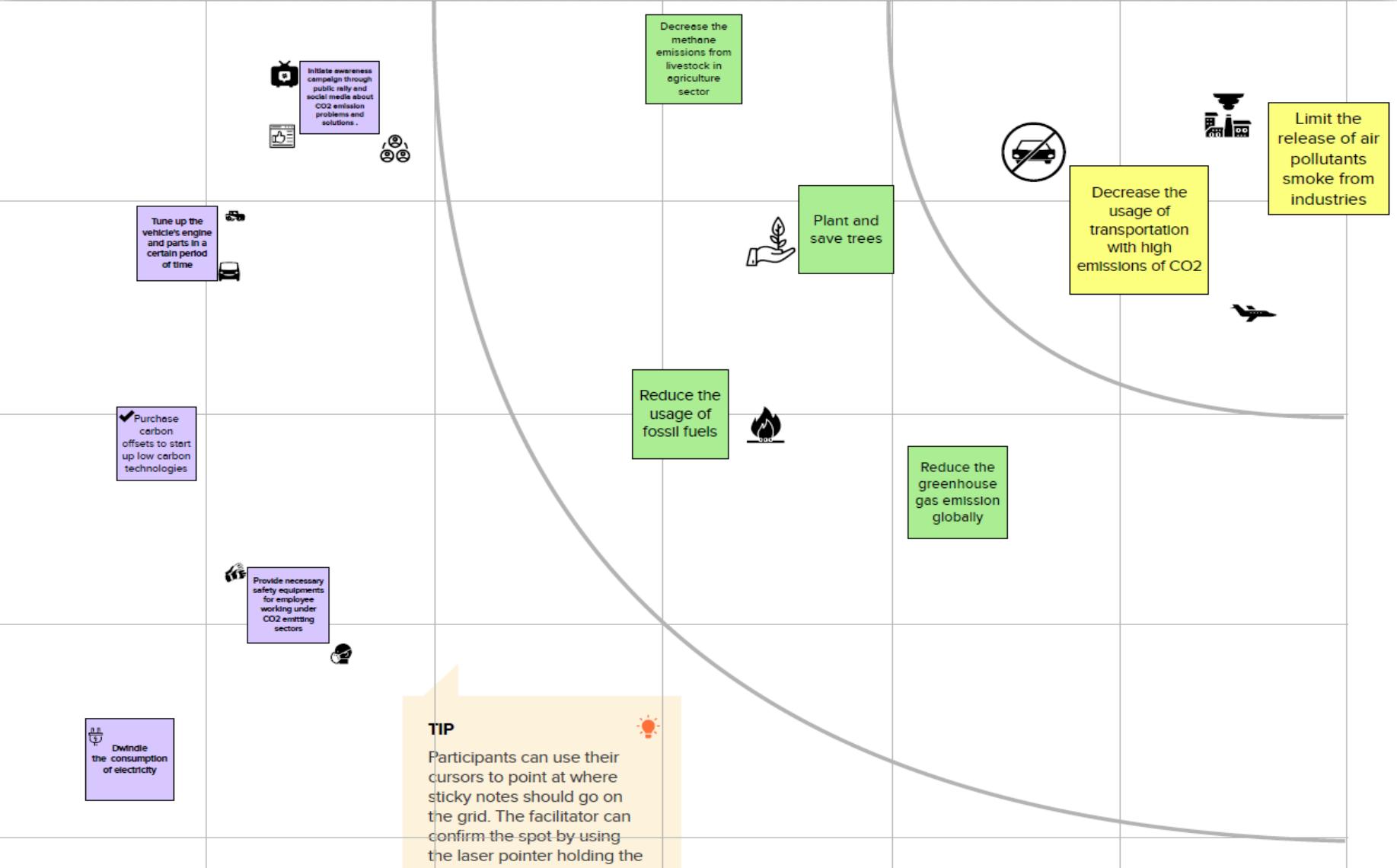


- Decrease the consumption of electricity
- Limit the mass production and usage of plastics
- Decrease the usage of transportation with high amounts of CO2
- Slow up the vehicles engine and drive for a certain period of time
- Control emission of CO2 from factories



# 4

## Prioritize

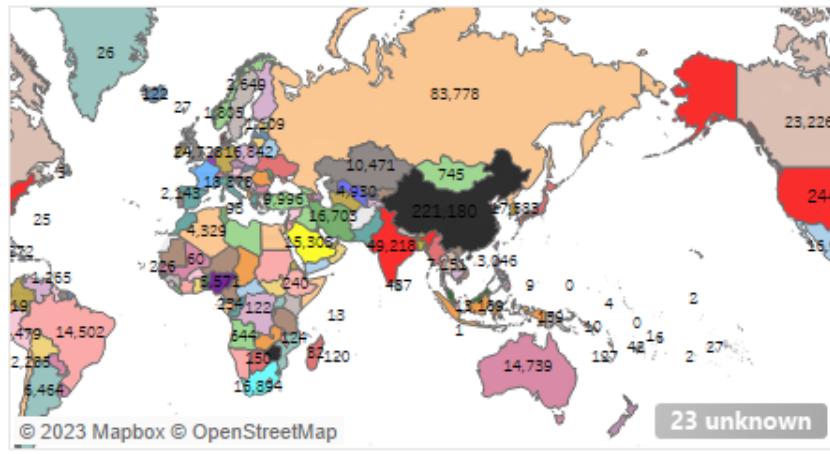




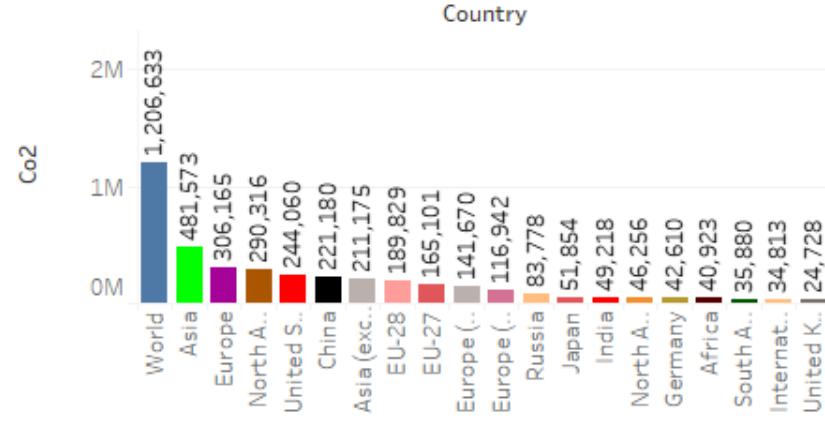
# DASHBOARDS

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

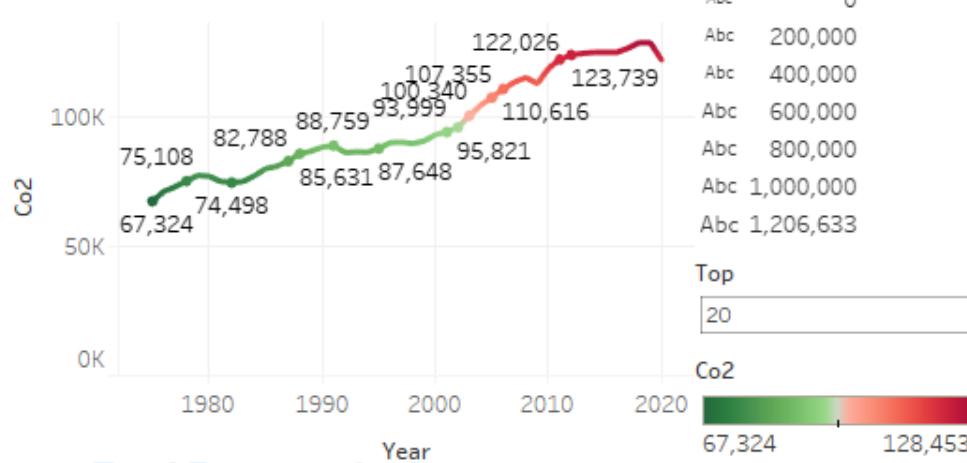
## Total World Emission



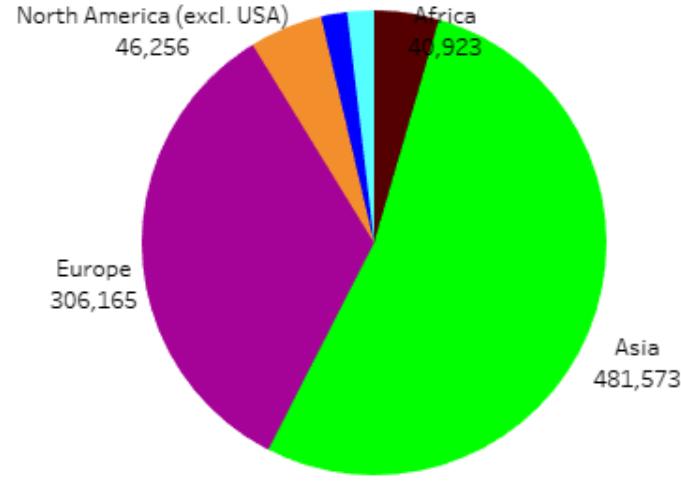
## Top Emitting Countries



## Co2 Emission Over Time

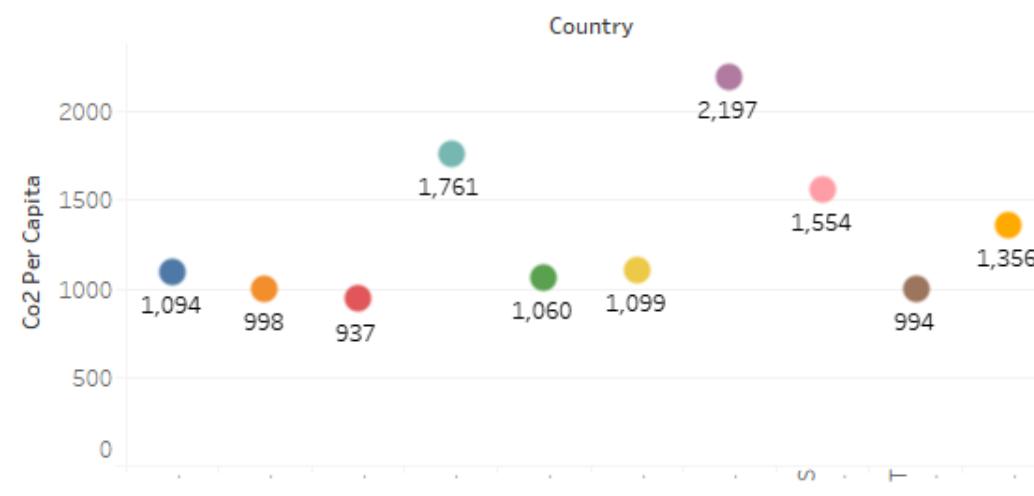


## Total Emission by Continents

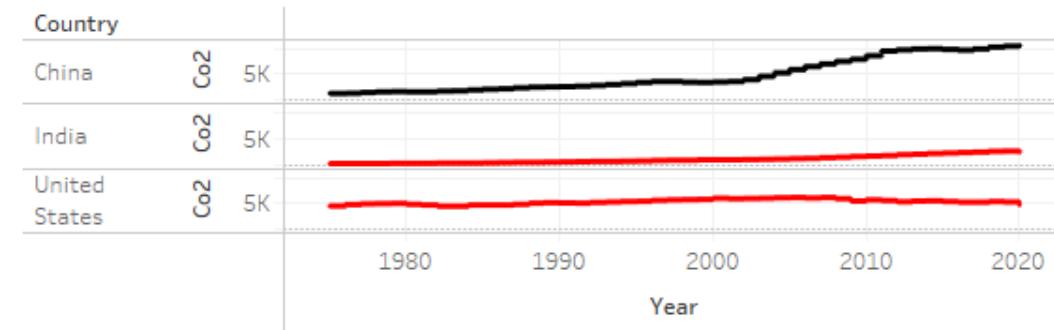


Next

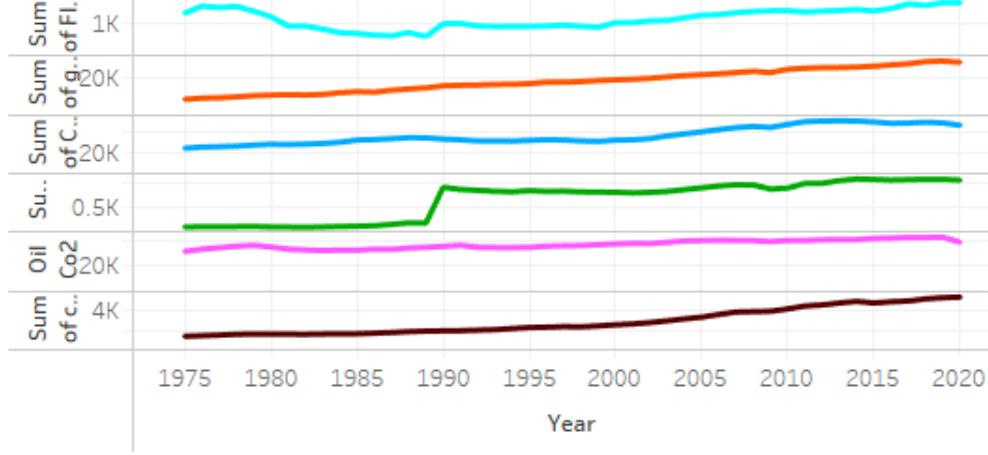
## Co2 Emission Per Capita



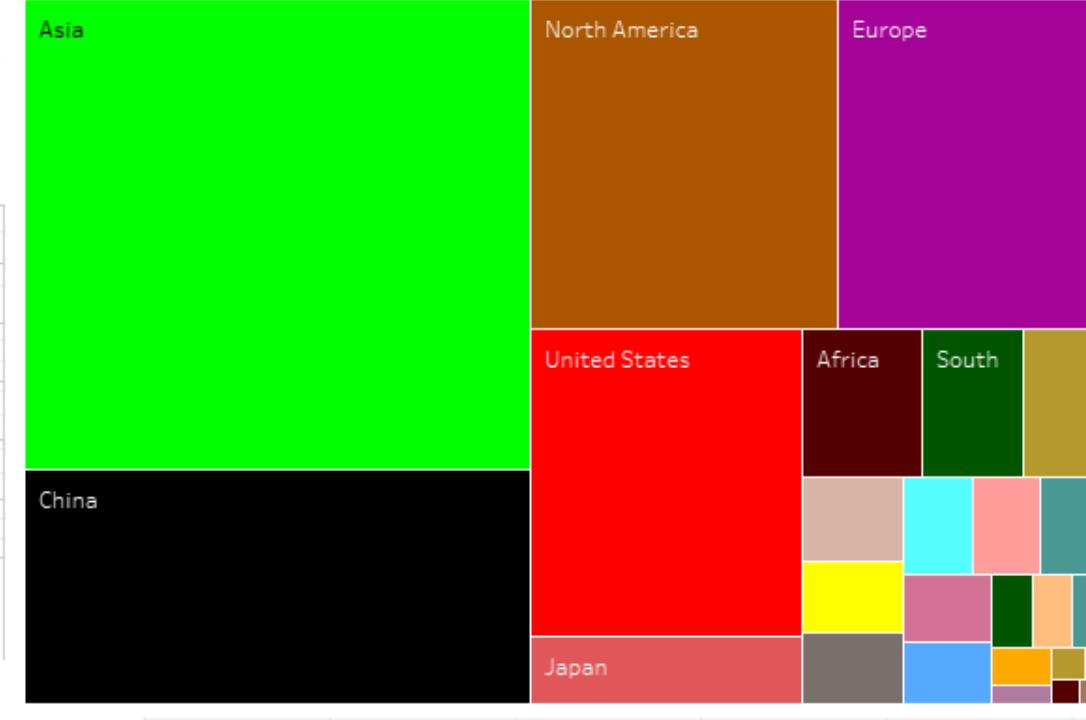
## Co2 Emission by Other Factors



## Emission Rate by Internal Factors



## Co2 Emission Over Past 20 Years



Country
Bahrain
Bonaire Sint Eustatius
Brunei
Curacao
Kuwait
Luxembourg
Qatar
Sint Maarten (Dutch)
Trinidad and Tobago
United Arab Emirates

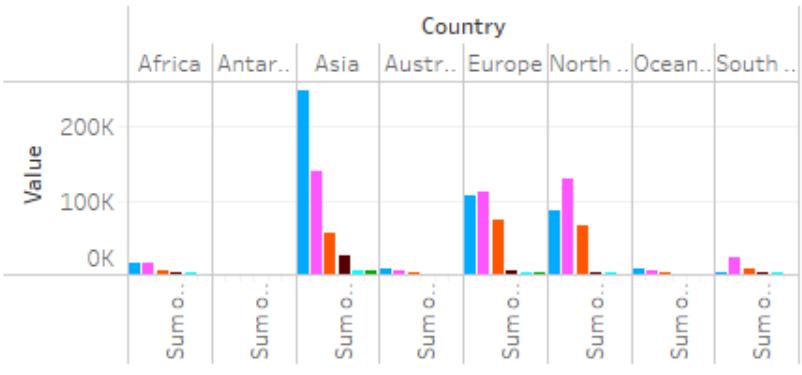
Measure Names
Oil Co2
Sum of Coal Co2
Sum of Flaring Co2
Sum of Other Industri..
Sum of cement_co2
Sum of gas_co2

Top  
20

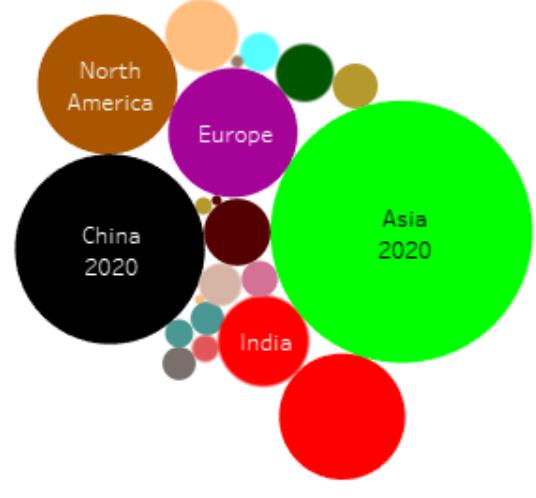
Previous

Next

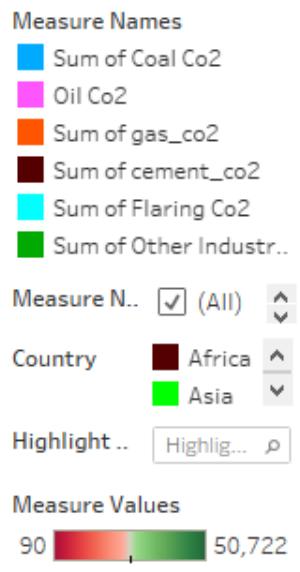
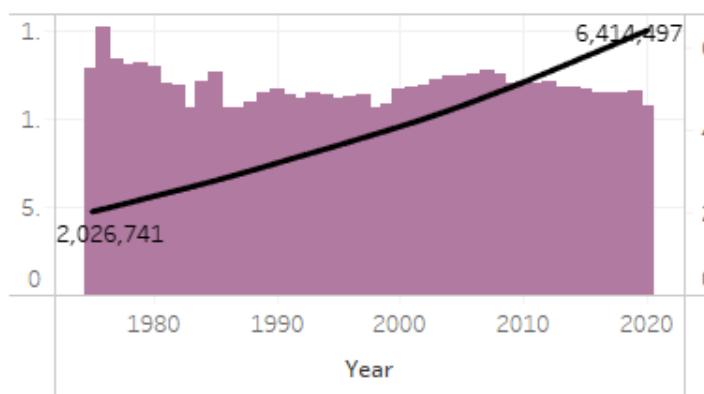
## Continent Wise Contribution by Internal Factors



## Co2 Emission in 2020

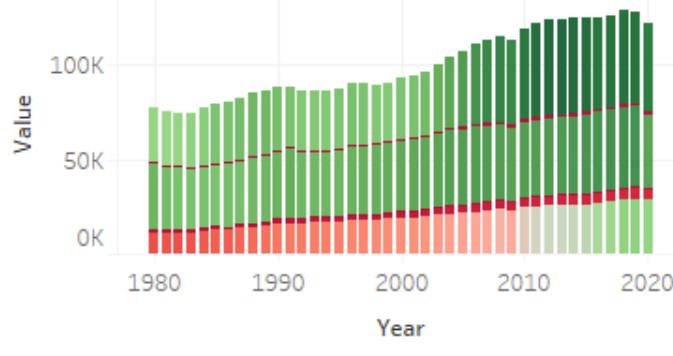


## Cummulative Co2 and Co2 per Capita over years



Home

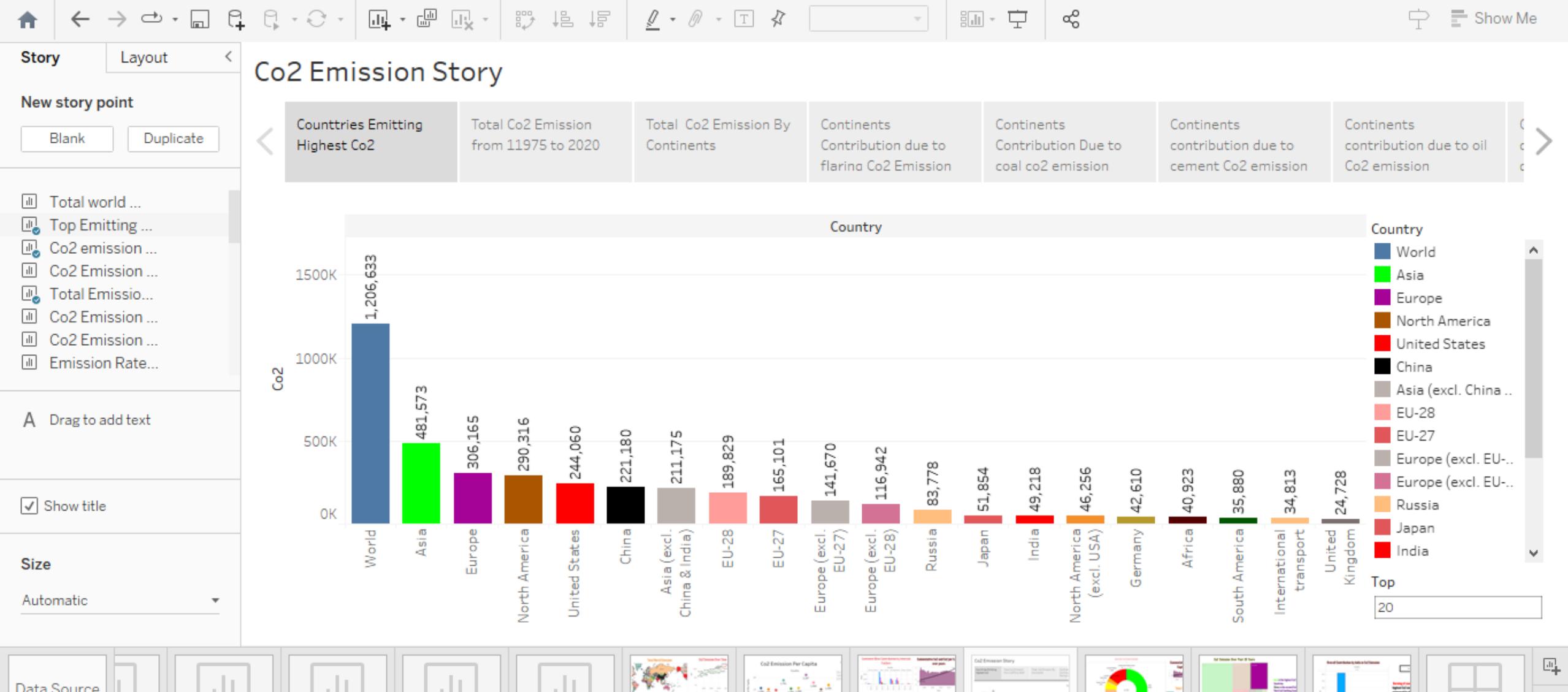
## Co2 Emission from 1980 to 2020 based on Internal Factors





STORY

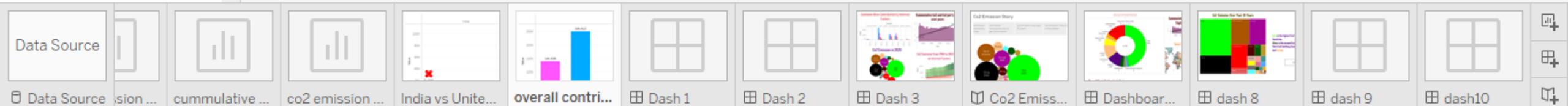
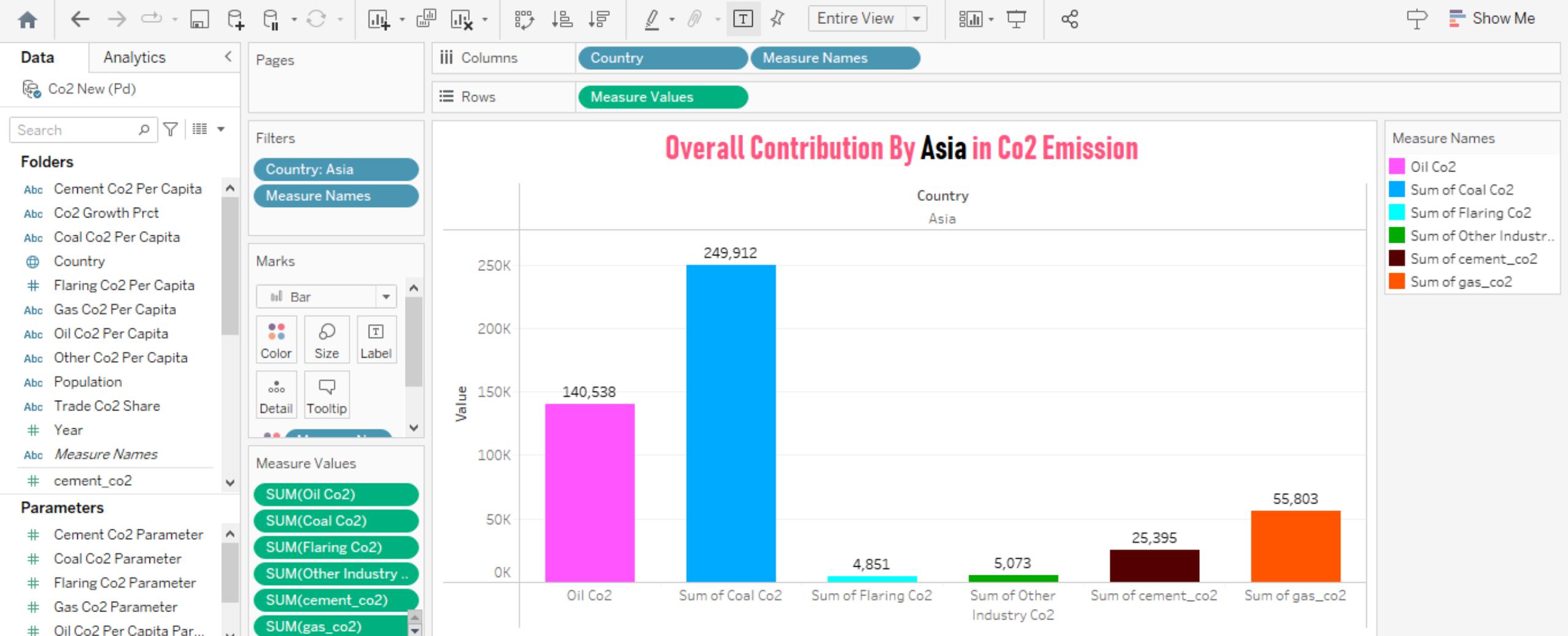
A data story is a way of presenting data and analysis in a narrative format, with the goal of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.



20 marks      1 row by 20 columns      SUM(Co2): 3,984,706



Type here to search

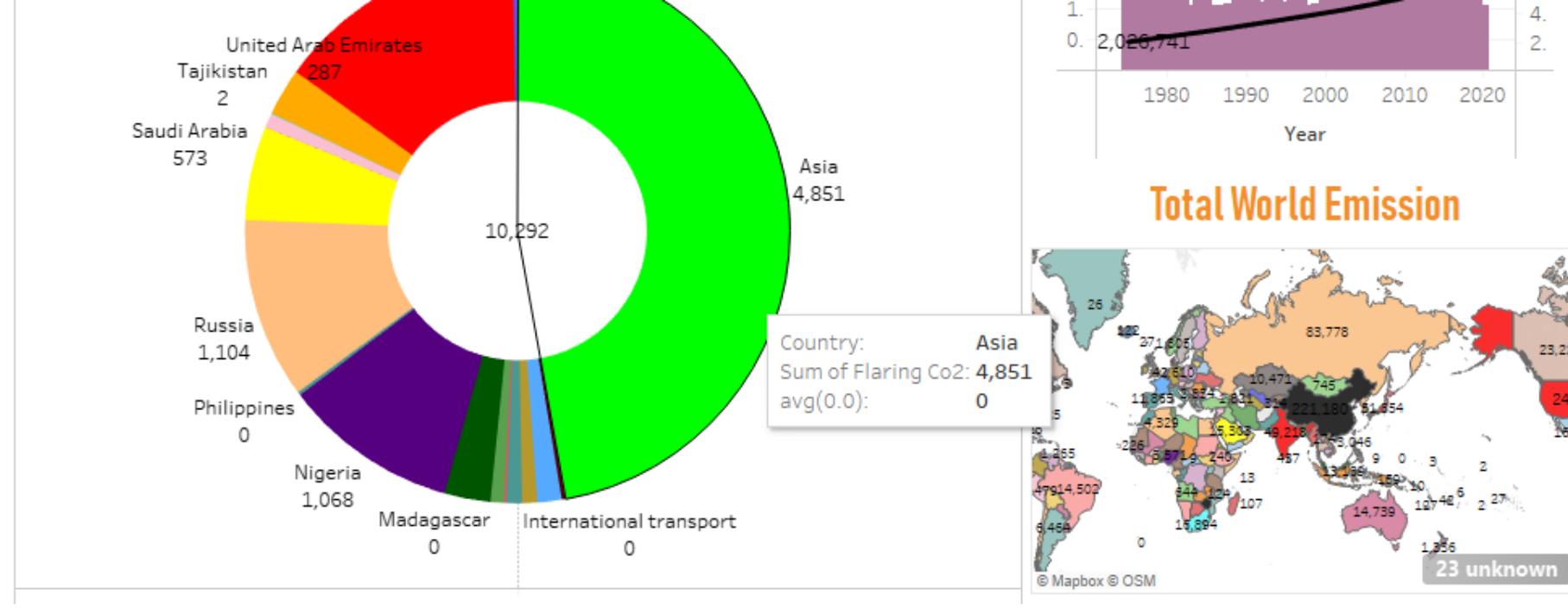


6 marks 1 row by 6 columns SUM of Measure Values: 481,573

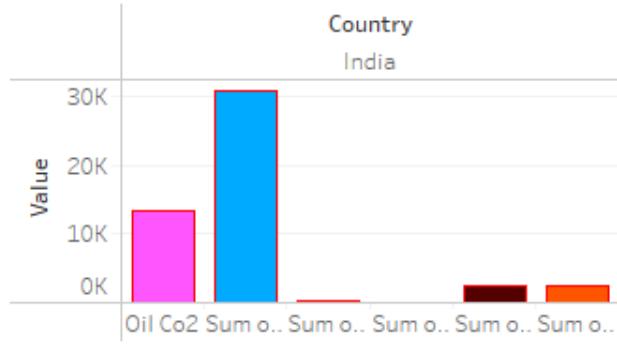


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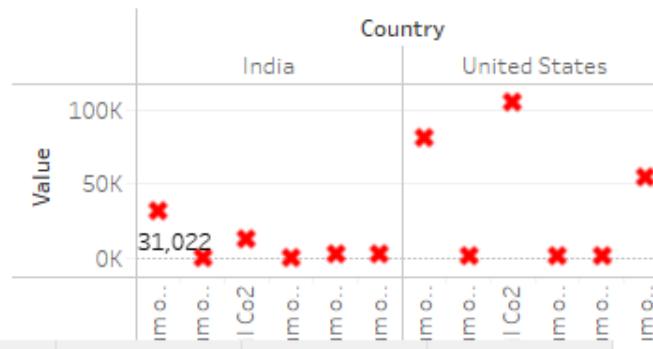
# VISUALIZATION



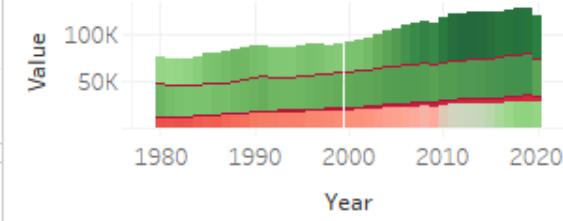
## Overall Contribution by India in Co2 Emission



## India VS United States Internal factors



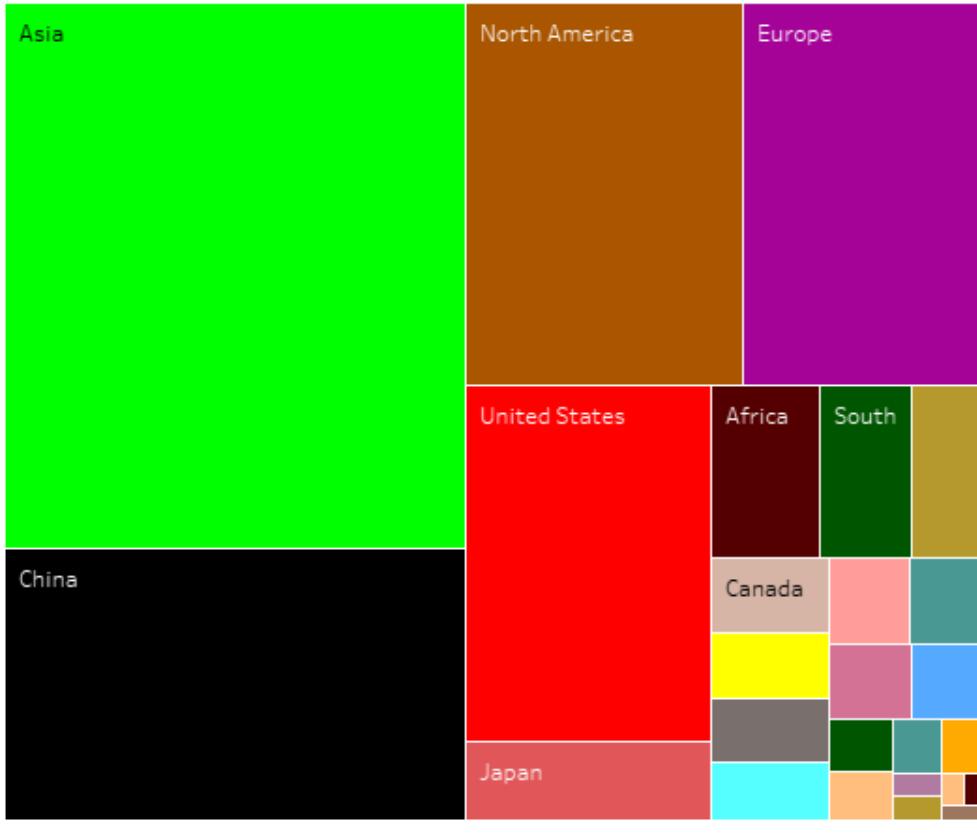
## Co2 Emission from 1980 to 2020 based on Internal Factors





# REPORTS

# Co2 Emission Over Past 20 Years



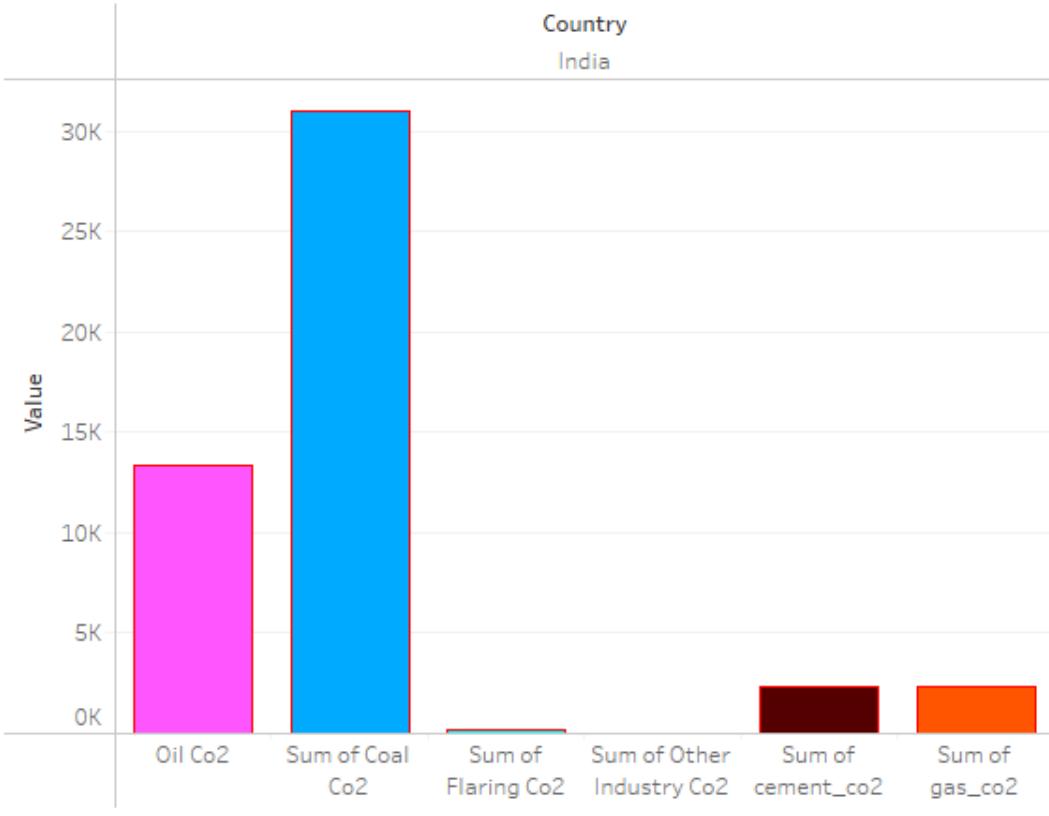
Asia is the highest Co2 Emitting Among Other Countries.

China is the second Co2 Emitting Country.

Third Co2 Emitting Country is North America And Europe

Next

## Overall Contribution by India in Co2 Emission



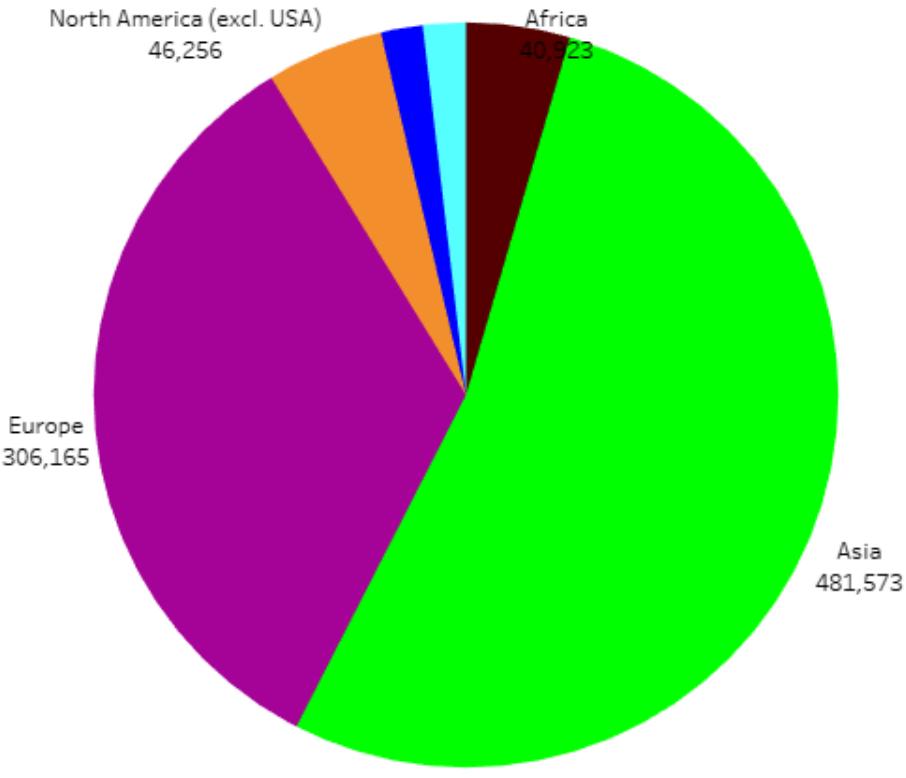
Next

**Burning of coal is one of the highest Co2 emitting factor when compared to oil in India**

**Cement and Gas factors emit least amount of Co2 when comapred to coal and oil**

Previous

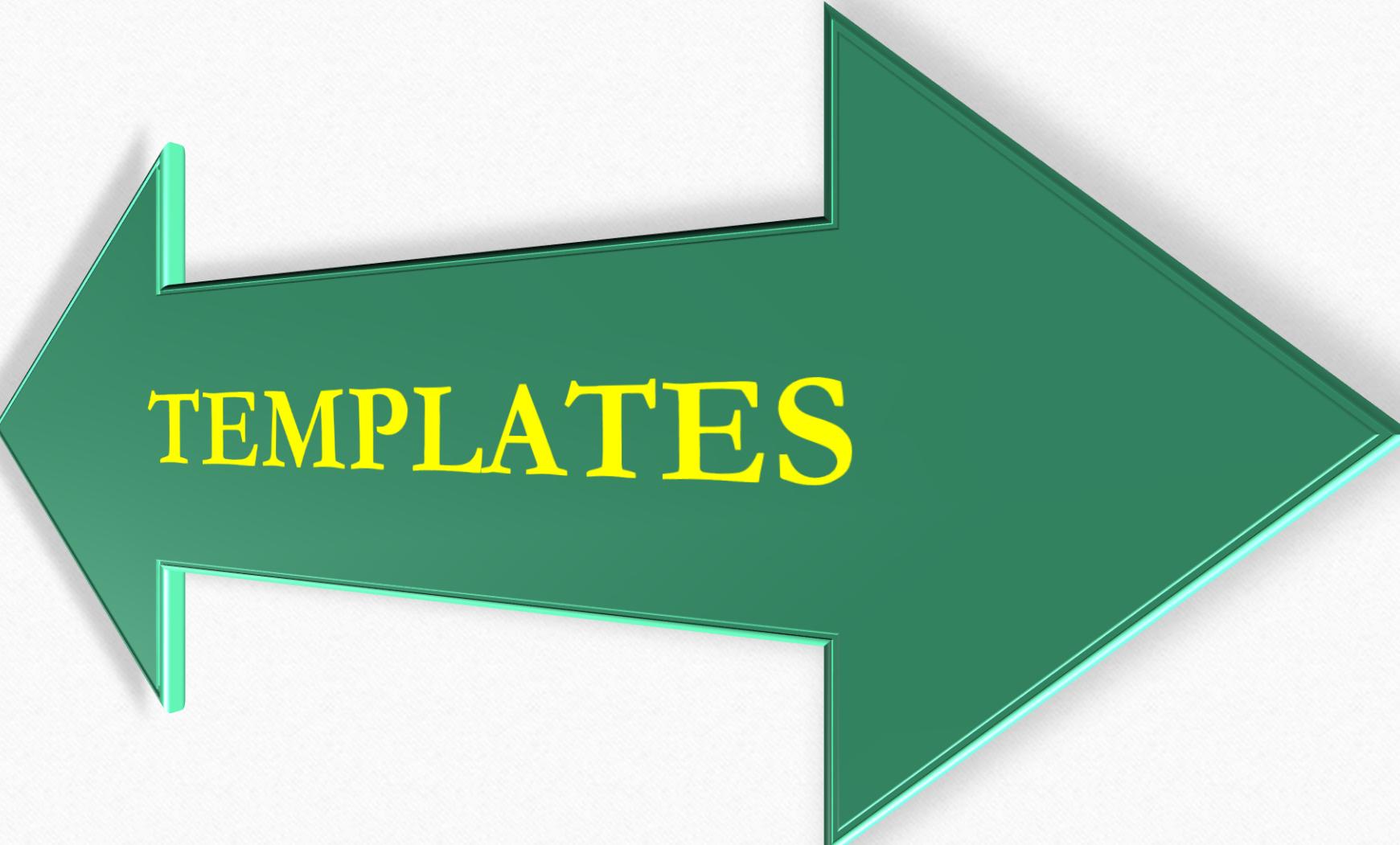
## Total Emission by Continents



**Asia** is one of the massive contributor of Co2 among other continents

**Europe** is the second largest Co2 emitting continent

**North America** is the third largest Co2 emitting continent



**TEMPLATES**

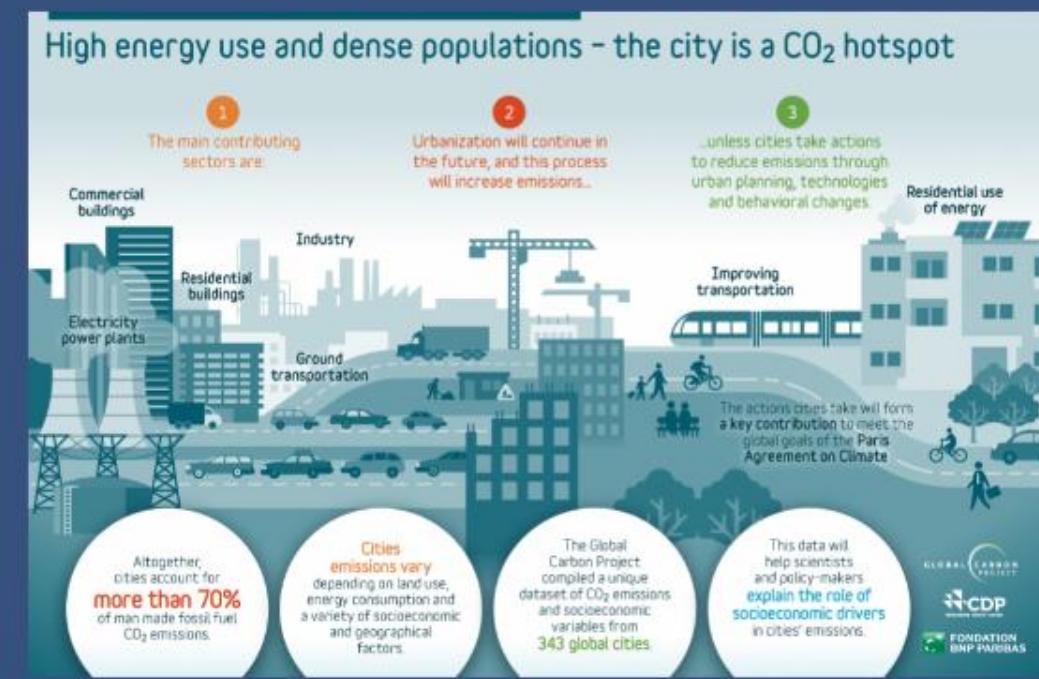


# CO2 EMISSION

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# Welcome To Global Co2 Emission Analysis

CO2 emissions are emissions stemming from the burning of fossil fuels and the manufacture of cement; they include carbon dioxide produced during consumption of solid, liquid, and gas fuels as well as gas flaring.

[Get Started](#)[Watch Video](#)



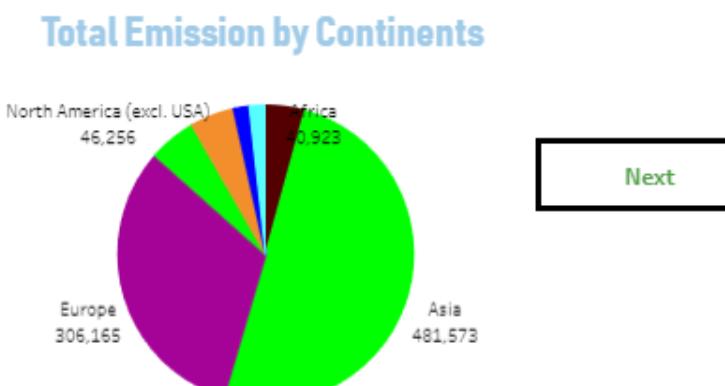
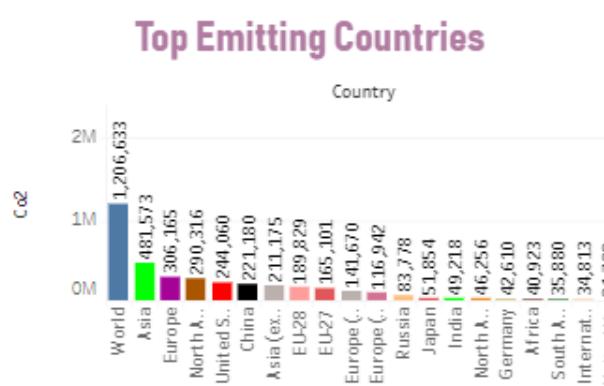
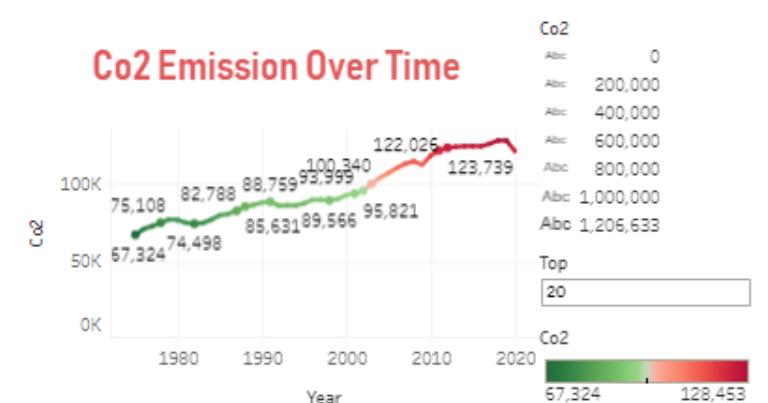




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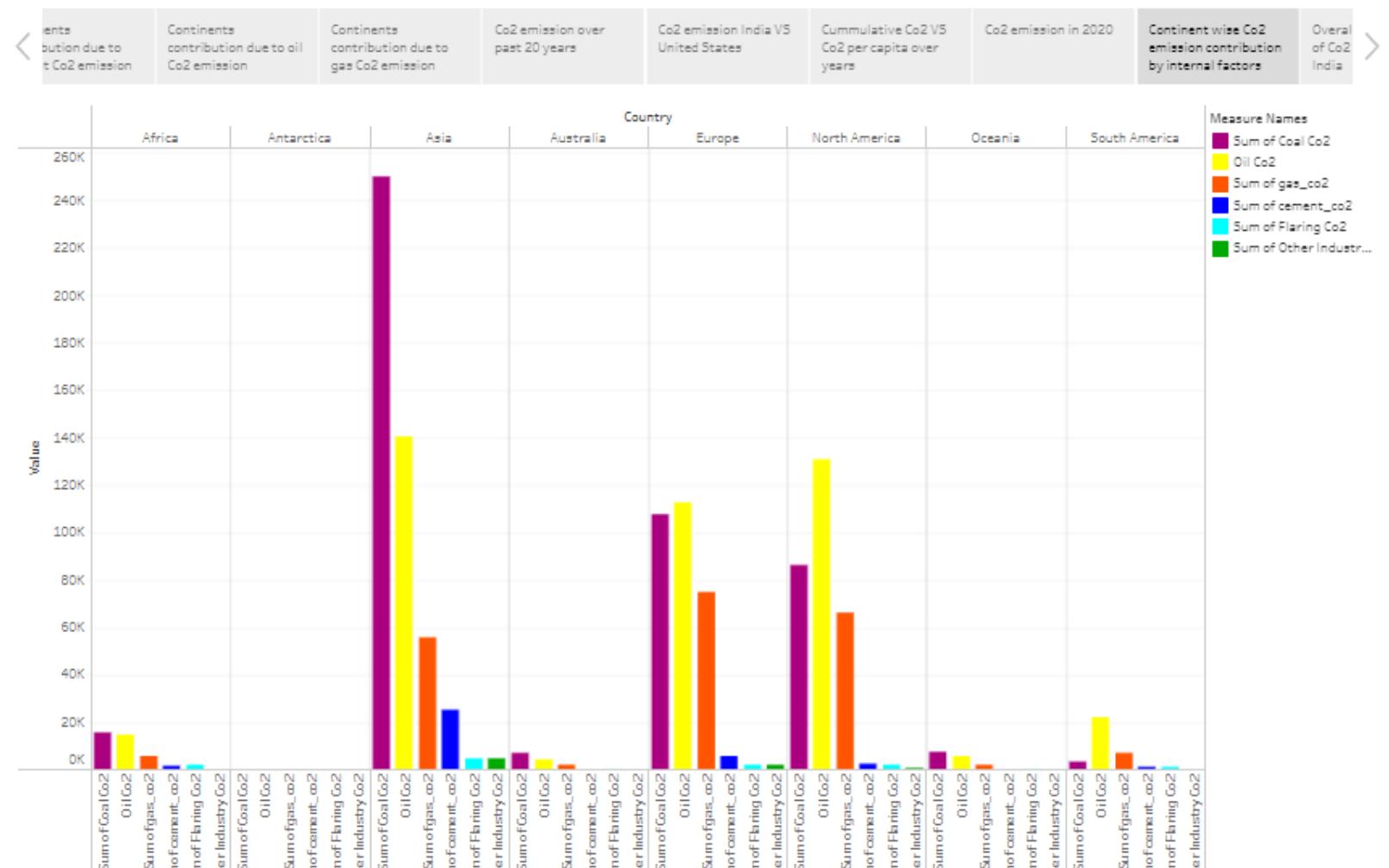
## DASHBOARD

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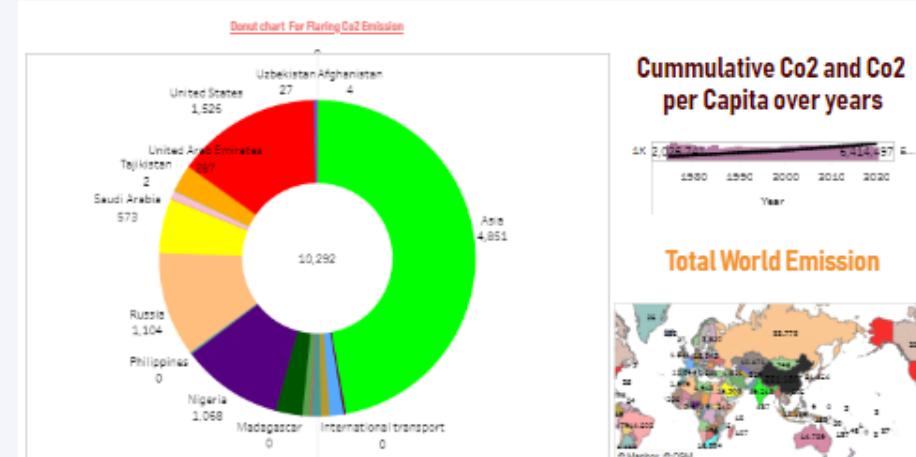
## Co2 Emission Story



## CO2 EMISSION

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## VISUALIZATION

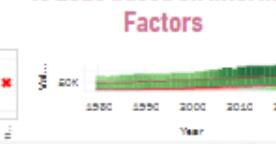


## Overall Contribution by India in Co2 Emission

## India VS United States Internal factors



## Co2 Emission from 1980 to 2020 based on Internal Factors



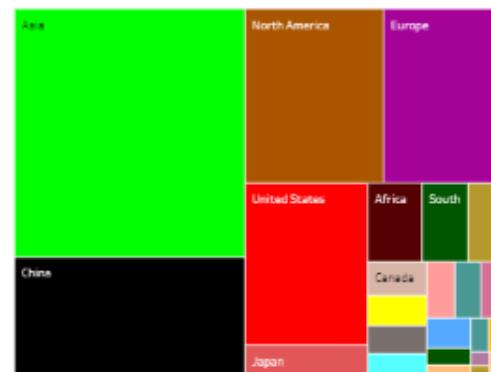
## REPORT

## CO2 EMISSION



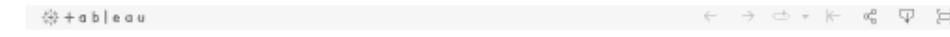
## REPORT

### Co2 Emission Over Past 20 Years



Asia is the highest Co2 Emitting Among  
Other Countries.  
China is the second Co2 Emitting  
Country.  
Third Co2 Emitting Country is North

Next





Co2 demo Story | T...

Co2 demo dashba...

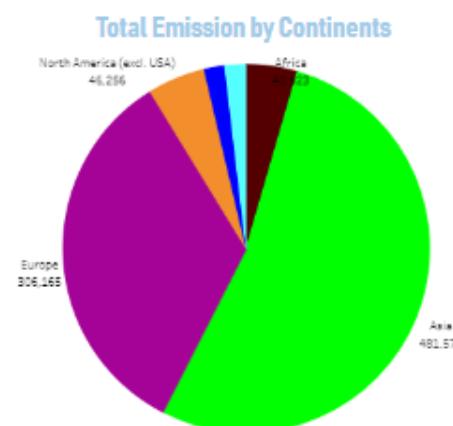
Co2 visualizations 2...

Co2 Emission - Ana...

## CO2 EMISSION



## REPORT



**Asia** is one of the massive contributor of Co2 among other continents  
**Europe** is the second largest Co2 emitting continent  
**North America** is the third largest Co2 emitting continent

[Home](#)

Co2 demo Story | T...

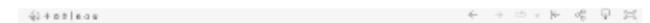
Co2 demo dashba...

Co2 visualizations 2...

B Co2 Emission - Ana...

## CO2 EMISSION

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## CONTACT

Our Contact Details.

Location:  
Tamilnadu, India  
Email:  
info@example.com  
Call:  
+91 98765 43210



Your Name  Your Email

Subject

Message

Send Message

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India  
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- > Marketing
- > Graphic Design

## Our Social Networks

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tincidunt vidua magna dicta velit.



# Advantages of our proposed solutions for Co2 emission

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## ADVANTAGES:

- ❑ We can save our environment from Global warming and other harmful diseases caused by the over exposure of Co2.
- ❑ We can make survive our future generations from polluted world.
- ❑ By using electric vehicles we can save the consumption of fuels
- ❑ Through our solutions provided we can create a grudge in the heart of people to minimize the usage of transportation, fossil fuels , plastics , and to practice afforestation

- ❑ **By using degradable plastics we can maintain our fertility of our soil and we can prevent from land ,air and water pollution**
- ❑ **By minimizing Co2 emitting factors all over the industries we can control 1 /4<sup>th</sup> of global warming**
- ❑ **Following the solutions mentioned in our empathy map one can able to recognize the consciousness about the Co2 emission spread all over the world .**
- ❑ **By saving and planting trees around us we can feel fresh air and rain.**

# APPLICATIONS

- Reducing our carbon emissions by following the mentioned solutions in the brainstorming, we can reverse the impact of global warming overall the world ,but more specifically, benefits the overall air quality such as fine particulate matter (PM2.5)
- Mitigates the effects of global climate, improves public health, boosts the global economy and maintains biodiversity .
- When we cut carbon emissions we help ensure cleaner air ,water and food for our generation and food for our generation and for generations yet to come .

# Conclusion

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- Through our Project based experimental program of Global Co2 emission analysis we started up with defining the problem and extracted our database and stored it in DB .
- By performing SQL operations and connected DB with Tableau
- With the high efficiency operation of Tableau desktop we have created our dashboards ,story, visualizations and report for our given dataset .
- We have created an innovative visualizations by giving different colours and different charts like bar graph , donart chart pie chart,

# Conclusion

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- We have given a complete view of top emitting countries of Co2 emission ,factors leading to Co2 emission, and comparison chart of different countries ,continents . We have published our tasks in tableau public Through web integration we have story,dashboard,visualization, and reports with UI with flask.
- Our motive is to alarm the world regarding the risk of increase in Co2 emission in the atmosphere
- We conclude our project with a request of giving your hands for the reduction of Global Co2 Emission

# Future scope

- Our future scope is to reduce the usage of fossil fuels , less transportation ,use E- Vehicles, ban the usage of undegradable plastics , and reduce the carbon footprints all over the world
- To be a responsible citizen in protecting our environment from toxic matters like Co2 emissions in the atmosphere
- Increase the usage of renewable resources
- By following the above mentioned solution we can protect our future generation from the harmful environment
- Join in the nearby eco-club for creating awareness about Co2 emission all over the world .

# APPENDIX

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## **SOURCE CODE:**

- a) [https://public.tableau.com/app/profile/p.madhumitha/viz/Co2demoStory\\_16814930827510/Co2EmissionStory?publish=yes](https://public.tableau.com/app/profile/p.madhumitha/viz/Co2demoStory_16814930827510/Co2EmissionStory?publish=yes)
- b) <https://public.tableau.com/app/profile/p.madhumitha/viz/Co2demodashboard/Dash1?publish=yes>
- c) <https://public.tableau.com/app/profile/p.madhumitha/viz/Co2visualizations2/Dashboard4?publish=yes>
- d) [https://public.tableau.com/app/profile/p.madhumitha/viz/Co2EmissionReport\\_16816553825460/dash8?publish=yes](https://public.tableau.com/app/profile/p.madhumitha/viz/Co2EmissionReport_16816553825460/dash8?publish=yes)
- e) [file:///C:/Users/ELCOT/Downloads/Arsha%20\(1\)/Arsha/Madhumitha%20Co2%20Emission%20new.html](file:///C:/Users/ELCOT/Downloads/Arsha%20(1)/Arsha/Madhumitha%20Co2%20Emission%20new.html)

**THANK YOU**

