❑ CARBON EMISSIONS DASHBOARD OVERVIEW

Analysis Of Global Carbon Emissions (2022)

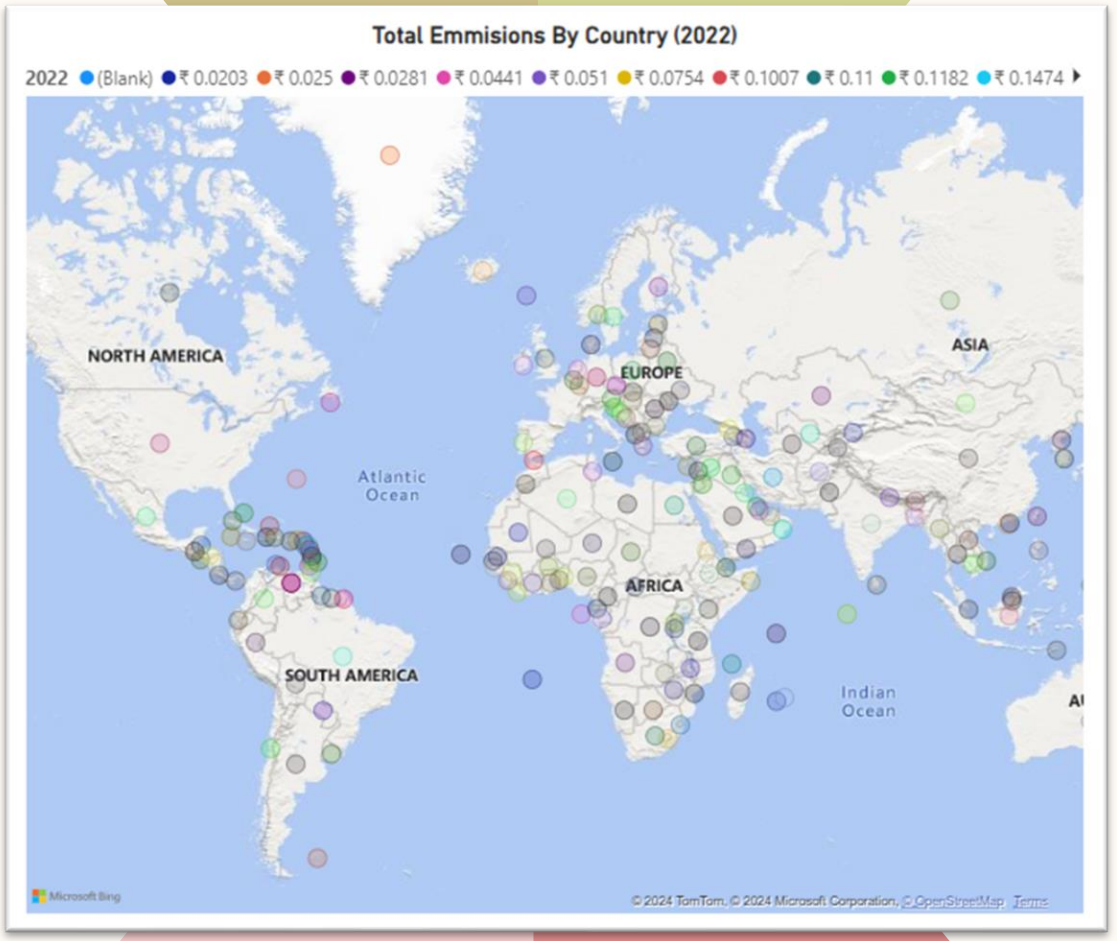
OVERVIEW

Carbon dioxide (CO2) emissions are a primary driver of global climate change. CO2 is released through various human activities, especially the burning of fossil fuels for energy and transportation.

- **Importance:** Analyzing CO2 emissions per capita helps identify individual contributions to global emissions, revealing which countries have the highest carbon footprints on a per-person basis.This insight is crucial for targeted climate policies.
- **Objective:** This presentation aims to use PowerBI to visualize CO2 emissions per capita, identify the countries with the highest emissions, and discuss potential reasons and implications.

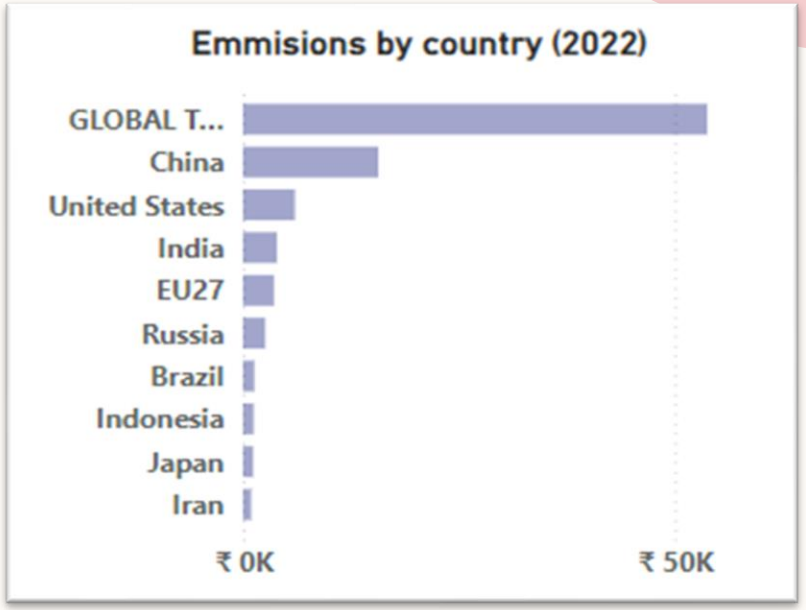
❑ TOTAL EMISSIONS BY COUNTRY (2022)

Highlight the key insights such as the top emitting countries (e.g., China, United States, India, EU27).



❑ EMISSIONS OVER TIME BY COUNTRY

Describe The Trend And Notable Changes Over The Years.



❑ EMISSIONS BY SECTOR

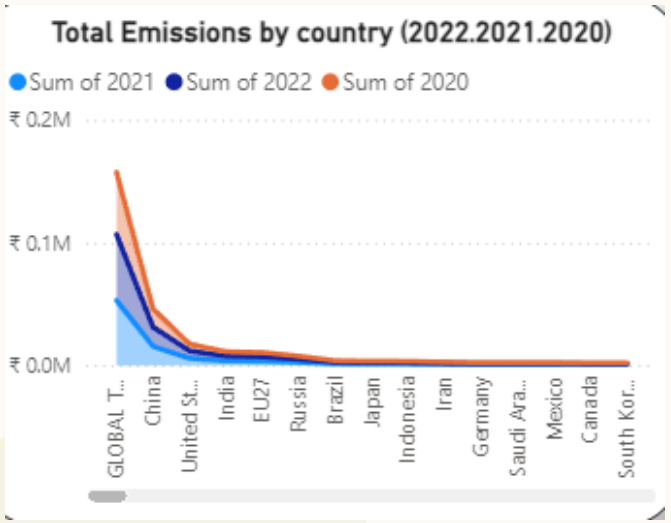
Explain the contributions of different sectors to total emissions.

Top 10 GHG By Sector and Country Code

Substance	Sector	EDGAR Country Code	Country	1970	1971	1972	1974	1975	1976	1977	1978	1979
CO2	Buildings	GLOBAL TOTAL	GLOBAL TOTAL	₹ 2,926.4582	₹ 2,939.5683	₹ 3,056.8708	₹ 3,040.6347	₹ 3,115.1794	₹ 3,242.3355	₹ 3,260.7353	₹ 3,361.433	₹ 3,400.58
CO2	Fuel Exploitation	GLOBAL TOTAL	GLOBAL TOTAL	₹ 1,562.2557	₹ 1,574.3996	₹ 1,654.4677	₹ 1,824.6055	₹ 1,684.6885	₹ 1,817.4998	₹ 1,822.7537	₹ 1,815.7542	₹ 1,818.43
CO2	Industrial Combustion	GLOBAL TOTAL	GLOBAL TOTAL	₹ 3,744.3048	₹ 3,511.721	₹ 3,602.042	₹ 3,774.9626	₹ 3,648.618	₹ 3,816.7191	₹ 3,984.9062	₹ 4,037.429	₹ 4,218.99
CO2	Power Industry	GLOBAL TOTAL	GLOBAL TOTAL	₹ 3,823.6994	₹ 3,910.9814	₹ 4,189.1059	₹ 4,603.8935	₹ 4,695.749	₹ 5,054.5092	₹ 5,275.5182	₹ 5,447.8397	₹ 5,661.22
CO2	Power Industry	USA	United States	₹ 1,082.1002	₹ 1,125.4949	₹ 1,248.082	₹ 1,304.8866	₹ 1,303.5577	₹ 1,408.7495	₹ 1,511.0956	₹ 1,487.4005	₹ 1,521.45
CO2	Transport	GLOBAL TOTAL	GLOBAL TOTAL	₹ 2,796.2866	₹ 2,876.5047	₹ 3,045.8816	₹ 3,191.5035	₹ 3,275.105	₹ 3,407.8242	₹ 3,529.0115	₹ 3,672.8093	₹ 3,737.8
CO2	Transport	USA	United States	₹ 1,039.7828	₹ 1,086.6479	₹ 1,154.5967	₹ 1,178.3568	₹ 1,193.4708	₹ 1,246.5694	₹ 1,285.1881	₹ 1,331.2096	₹ 1,303.32
GWP_100_AR5_CH4	Agriculture	GLOBAL TOTAL	GLOBAL TOTAL	₹ 3,586.0832	₹ 3,647.809	₹ 3,661.8795	₹ 3,763.0118	₹ 3,814.5581	₹ 3,828.4524	₹ 3,837.1235	₹ 3,828.7375	₹ 3,818.38
GWP_100_AR5_CH4	Fuel Exploitation	GLOBAL TOTAL	GLOBAL TOTAL	₹ 2,015.3547	₹ 1,991.62	₹ 2,049.7427	₹ 2,121.8922	₹ 2,123.0351	₹ 2,165.0218	₹ 2,197.803	₹ 2,215.4716	₹ 2,319.10
GWP_100_AR5_CH4	Waste	GLOBAL TOTAL	GLOBAL TOTAL	₹ 1,131.0463	₹ 1,188.4685	₹ 1,212.4088	₹ 1,255.7122	₹ 1,272.4526	₹ 1,302.4659	₹ 1,324.0252	₹ 1,350.1222	₹ 1,373.24

❑ GEOGRAPHIC DISTRIBUTION OF EMISSIONS

Provide insights on geographic patterns in emissions.



❑ STRATEGIC RECOMMENDATIONS

Energy Transition: Prioritize the shift from fossil fuels to renewable energy sources, especially in high-emission sectors like power and transport.

Energy Efficiency: Implement policies to improve energy efficiency in buildings and industries to reduce emissions without compromising economic growth.

Sustainable Transport: Invest in the development and adoption of electric vehicles and public transportation systems to curb emissions from the transport sector.

Sustainable Agriculture: Promote sustainable agricultural practices and technologies to reduce methane emissions from agriculture.International Cooperation: Foster international cooperation to share best practices and technologies for emission reductions, especially among top-emitting countries.

NEXT STEPS:

- **Detailed Analysis:** Conduct a more detailed analysis of specific sectors and regions to identify the most impactful areas for intervention.
- **Policy Development:** Develop targeted policies and initiatives to address the highest sources of emissions.
- **Monitoring and Reporting:** Establish robust monitoring and reporting mechanisms to track progress and adjust strategies as needed.

INSIGHTS FOR THE CARBON EMISSIONS DASHBOARD

- **Total Emissions by Country (2022)Top Emitters**: The countries with the highest total emissions are China, the United States, and India. These countries significantly contribute to global emissions, with China leading by a substantial margin.Comparative Analysis: The emissions from China are more than double those of the United States, the second-highest emitter, indicating a significant disparity in emission levels between the top two countries
- **Emissions Over Time by CountryTrends**: Emissions have shown a general increasing trend over the past few years for major emitting countries.COVID-19 Impact: There may be noticeable drops or slower growth in emissions during 2020, likely due to the COVID-19 pandemic and associated lockdowns reducing industrial activity and transportation.Recovery: Post-2020, there might be a rebound in emissions as countries recover from the pandemic, with some countries potentially surpassing their pre-pandemic emission levels.

Emissions by SectorDominant Sectors: The Power Industry and Transport sectors are significant contributors to CO2 emissions. These sectors are critical targets for emission reduction strategies.Sectoral Breakdown:Power Industry: This sector alone accounts for a large portion of global emissions, highlighting the need for a transition to renewable energy sources.Transport: Significant emissions from this sector suggest the importance of developing sustainable transport solutions, such as electric vehicles and improved public transportation.

- **Geographic Distribution of EmissionsRegional Patterns:** Emissions are highly concentrated in specific regions, with Asia (particularly China and India), North America (United States), and Europe (EU27) being major hotspots.Global Distribution: The map visualization provides a clear view of how emissions are spread across the globe, showing both densely and sparsely emitting regions.
- **Sectoral Emissions over TimeBuildings:** Emissions from buildings have shown a steady increase, indicating growing energy consumption and urbanization.Fuel Exploitation: Emissions from fuel exploitation activities are also on the rise, underscoring the ongoing reliance on fossil fuels.Agriculture: Emissions from agriculture, especially methane (CH4), remain significant, pointing to the need for sustainable agricultural practices.
- **Top 10 GHG by Sector and Country CodeGlobal Leaders:** The global total emissions across different sectors provide insight into the largest sources of greenhouse gases (GHGs).Country-Specific Data: For instance, the United States has substantial emissions in both the Power Industry and Transport sectors, reflecting its industrial and automotive activities.