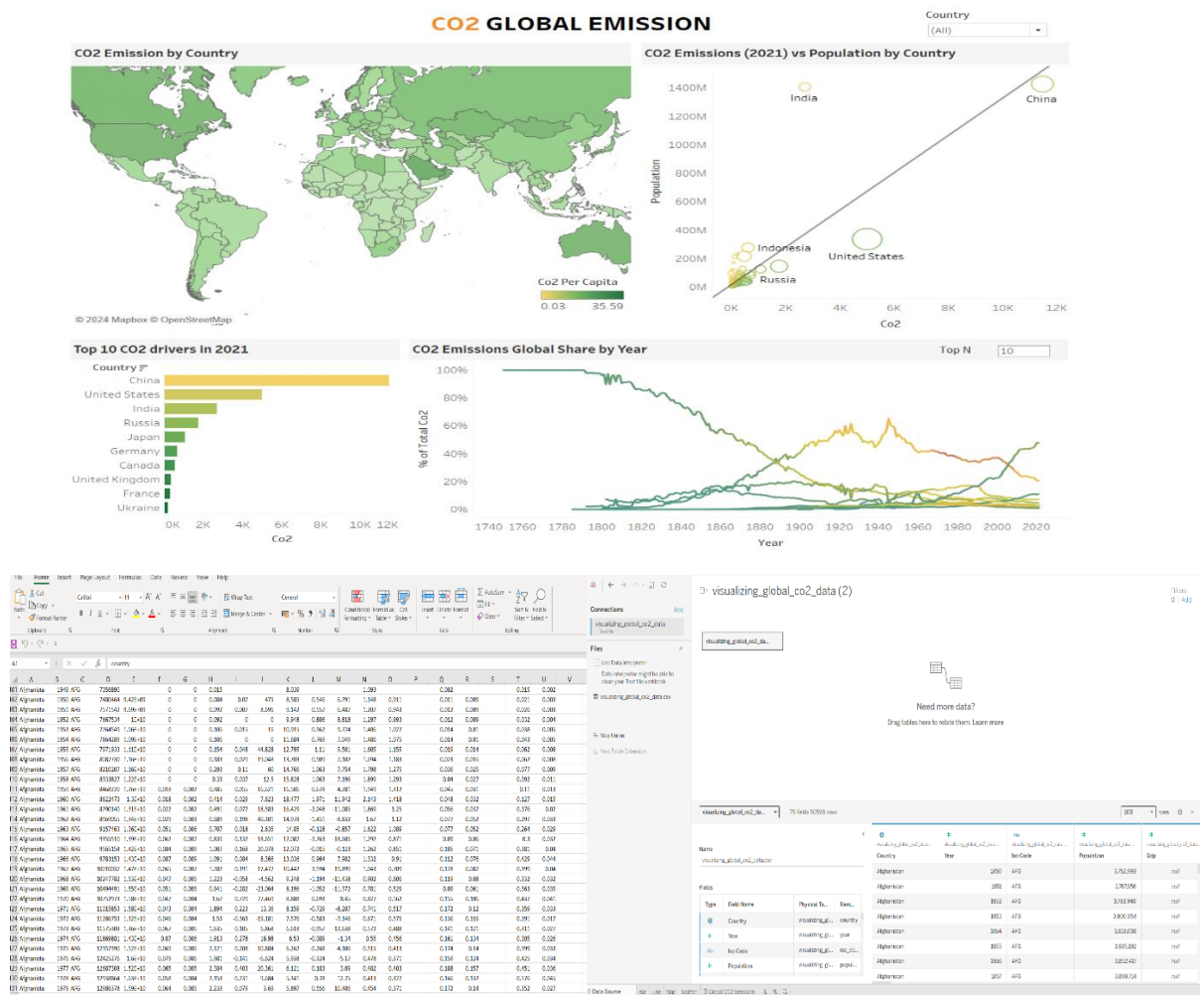


CO2 GLOBAL EMISSION

Objectives:

The objective of this analysis is to understand which regions are global drivers of carbon emissions and their impact. The goal is to transform the raw data into a dynamic dashboard that users can identify patterns, trends, and drivers of global CO2 emissions.



Exploring Data:

Upon connecting the "visualizing_global_co2_data" CSV to the **TABLEAU**, it was observed that countries like China, United States, and India are among the largest contributors of CO2 emissions.

country																										
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V					
101	Afghanistan	1949	AFG	7356890		0	0	0.015			8.039		1.093			0.002			0.015	0.002						
102	Afghanistan	1950	AFG	7480464	9.42E+09	0	0	0.084	0.07	475	8.585	0.546	6.791	1.148	0.911		0.011	0.009		0.021	0.003					
103	Afghanistan	1951	AFG	7571542	9.69E+09	0	0	0.092	0.007	8.696	9.142	0.557	6.487	1.207	0.943		0.012	0.009		0.026	0.003					
104	Afghanistan	1952	AFG	7667534	1E+10	0	0	0.092	0	0	9.948	0.806	8.818	1.297	0.993		0.012	0.009		0.032	0.004					
105	Afghanistan	1953	AFG	7764549	1.06E+10	0	0	0.106	0.015	16	10.915	0.967	9.724	1.406	1.027		0.014	0.01		0.038	0.005					
106	Afghanistan	1954	AFG	7864289	1.09E+10	0	0	0.106	0	0	11.684	0.769	7.049	1.486	1.075		0.014	0.01		0.043	0.005					
107	Afghanistan	1955	AFG	7971933	1.11E+10	0	0	0.154	0.048	44.828	12.795	1.11	9.501	1.605	1.155		0.019	0.014		0.062	0.008					
108	Afghanistan	1956	AFG	8087730	1.16E+10	0	0	0.183	0.029	19.048	13.703	0.909	7.102	1.694	1.183		0.023	0.016		0.062	0.008					
109	Afghanistan	1957	AFG	8210207	1.16E+10	0	0	0.293	0.11	60	14.766	1.063	7.754	1.798	1.275		0.036	0.025		0.077	0.009					
110	Afghanistan	1958	AFG	8333827	1.22E+10	0	0	0.33	0.037	12.5	15.828	1.063	7.196	1.899	1.293		0.04	0.027		0.092	0.011					
111	Afghanistan	1959	AFG	8468220	1.26E+10	0.018	0.002	0.385	0.055	16.621	16.506	0.678	4.281	1.949	1.312		0.045	0.031		0.11	0.013					
112	Afghanistan	1960	AFG	8622473	1.3E+10	0.018	0.002	0.414	0.029	7.623	18.477	1.971	11.942	2.143	1.418		0.048	0.032		0.127	0.015					
113	Afghanistan	1961	AFG	8790140	1.31E+10	0.022	0.002	0.491	0.077	18.583	16.429	-2.048	-11.085	1.869	1.25		0.056	0.037		0.176	0.02					
114	Afghanistan	1962	AFG	8969055	1.34E+10	0.029	0.003	0.589	0.198	40.301	14.978	-1.451	-8.832	1.67	1.12		0.077	0.052		0.297	0.033					
115	Afghanistan	1963	AFG	9157463	1.36E+10	0.051	0.006	0.707	0.018	2.635	14.85	-0.128	-8.857	1.622	1.089		0.077	0.052		0.264	0.029					
116	Afghanistan	1964	AFG	9355510	1.39E+10	0.062	0.007	0.839	0.132	18.651	12.087	-2.763	-18.605	1.292	0.871		0.09	0.06		0.3	0.032					
117	Afghanistan	1965	AFG	9565154	1.42E+10	0.084	0.009	1.007	0.168	20.078	12.072	-0.015	-0.123	1.262	0.851		0.105	0.071		0.381	0.04					
118	Afghanistan	1966	AFG	9783153	1.43E+10	0.087	0.009	1.091	0.084	8.366	13.036	0.964	7.982	1.332	0.91		0.112	0.076		0.429	0.044					
119	Afghanistan	1967	AFG	10010037	1.47E+10	0.065	0.007	1.282	0.191	17.477	10.442	-2.594	-19.899	1.043	0.709		0.128	0.087		0.399	0.04					
120	Afghanistan	1968	AFG	10247782	1.53E+10	0.047	0.005	1.223	-0.058	-4.562	9.248	-1.194	-11.438	0.902	0.606		0.119	0.08		0.332	0.032					
121	Afghanistan	1969	AFG	10494491	1.55E+10	0.051	0.005	0.941	-0.282	-23.064	8.196	-1.052	-11.372	0.781	0.529		0.09	0.061		0.363	0.035					
122	Afghanistan	1970	AFG	10752973	1.58E+10	0.047	0.004	1.67	0.729	77.469	8.888	0.693	8.45	0.827	0.562		0.155	0.106		0.437	0.041					
123	Afghanistan	1971	AFG	11015853	1.58E+10	0.043	0.004	1.894	0.223	13.36	8.159	-0.729	-8.207	0.741	0.517		0.172	0.12		0.359	0.033					
124	Afghanistan	1972	AFG	11286753	1.32E+10	0.046	0.004	1.53	-0.363	-19.181	7.576	-0.583	-7.146	0.671	0.575		0.136	0.116		0.191	0.017					
125	Afghanistan	1973	AFG	11575308	1.36E+10	0.067	0.006	1.635	0.105	6.868	6.618	-0.957	-12.638	0.572	0.488		0.141	0.121		0.311	0.027					
126	Afghanistan	1974	AFG	11869881	1.43E+10	0.07	0.006	1.913	0.278	16.98	6.53	-0.089	-1.34	0.55	0.456		0.161	0.134		0.305	0.026					
127	Afghanistan	1975	AFG	12157390	1.52E+10	0.069	0.006	2.121	0.208	10.884	6.262	-0.268	-4.106	0.515	0.413		0.174	0.14		0.399	0.033					
128	Afghanistan	1976	AFG	12425276	1.6E+10	0.079	0.006	1.981	-0.141	-6.624	5.938	-0.324	-5.17	0.478	0.371		0.159	0.124		0.425	0.034					
129	Afghanistan	1977	AFG	12687308	1.52E+10	0.065	0.005	2.384	0.403	20.361	6.121	0.183	3.09	0.482	0.403		0.188	0.157		0.451	0.036					
130	Afghanistan	1978	AFG	12938864	1.63E+10	0.058	0.004	2.153	-0.231	-9.684	5.341	-0.78	-12.75	0.413	0.327		0.166	0.132		0.576	0.045					
131	Afghanistan	1979	AFG	12986378	1.59E+10	0.064	0.005	2.233	0.079	3.69	5.897	0.556	10.406	0.454	0.371		0.172	0.14		0.352	0.027					
132	Afghanistan	1980	AFG	12486640	1.53E+10	0.023	0.002	1.756	-0.476	-21.339	4.907	-0.989	-16.779	0.393	0.32	0.63	0.141	0.115	0.225	0.316	0.025					

← → ↺ ↻

Connections

visualizing_global_co2_data

Files

Use Data Interpreter

visualizing_global_co2_data.csv

New Union

New Table Extension

visualizing_global_co2_data (2)

visualizing_global_co2_data...

Need more data?

Drag tables here to relate them. [Learn more](#)

visualizing_global_co2_data...

79 fields 50598 rows

100 rows

Name	visualizing_global_co2_data...	visualizing_global_co2_data...	Abc	visualizing_global_co2_data...	visualizing_global_co2_data...
	Country	Year	Iso Code	Population	Gdp
visualizing_global_co2_data.csv	Afghanistan	1850	AFG	3,752,993	null
	Afghanistan	1851	AFG	3,767,956	null
	Afghanistan	1852	AFG	3,783,940	null
	Afghanistan	1853	AFG	3,800,954	null
	Afghanistan	1854	AFG	3,818,038	null
	Afghanistan	1855	AFG	3,835,192	null
	Afghanistan	1856	AFG	3,852,417	null
	Afghanistan	1857	AFG	3,869,714	null

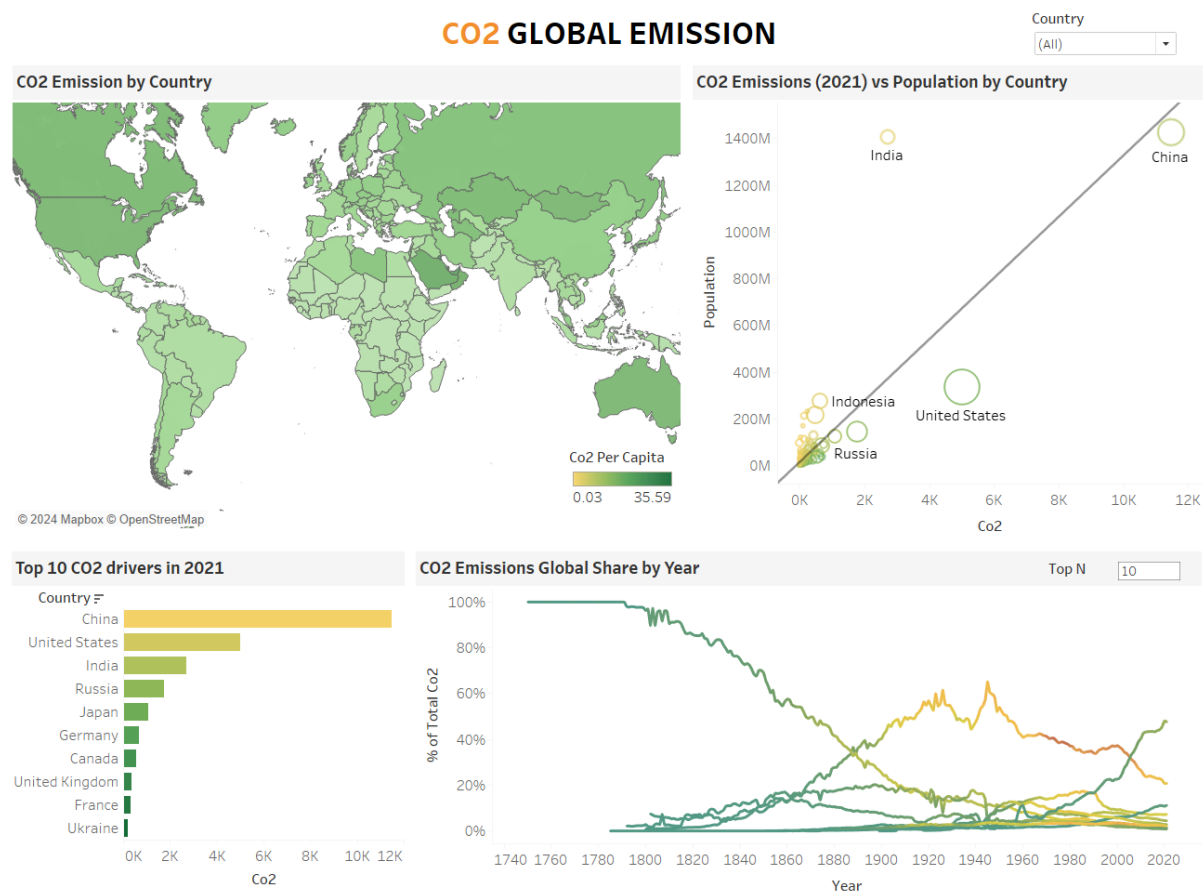
Tasks:

- Data Filtering:** A data source filter was applied to exclude records with NULL Iso Codes.

2. **Data Type Optimization:** All fields with "CO2" in their name were converted to the Number (Whole) data type and changed to continuous measure.
3. **Parameter Creation:** A new integer type parameter named "Top N" was created with a default value of 10.
4. **Bar Chart:** A bar chart was created displaying top 10 countries responsible for global CO2 emissions in 2021.
5. **Line Chart:** A line chart was created showing the % of total share of CO2 by year for the top 10 countries using the "Top N" parameter.
6. **Map Visualization:** A map at the country level was generated using CO2 Per Capita for the year 2021, with any country/region errors fixed and null value countries removed.
7. **Scatter Plot:** A scatter plot comparing CO2 and population at the country level was created, with bubbles sized by Temperature Change from CO2 for the year 2021. A linear regression trend line was also added as a bonus.

Dashboard Assembly:

Sheets displaying top 10 countries driving global CO2 emissions in 2021 as a bar chart, % of CO2 trend as a line chart, CO2 per capita as a map, and the relationships between CO2 and population as a scatter plot were added to the dashboard. A title and the "Top N" parameter were included at the top of the dashboard.



Insights and Patterns:

Upon analysis, several interesting patterns and trends emerged:

- The top contributors to global CO2 emissions are consistently visible across the years.
- There seems to be a correlation between CO2 emissions and population, with densely populated countries often emitting more CO2.
- The interactive dashboard allows users to explore the data and gain insights into the global CO2 impact and trends easily.