Greenhouse Bulletin

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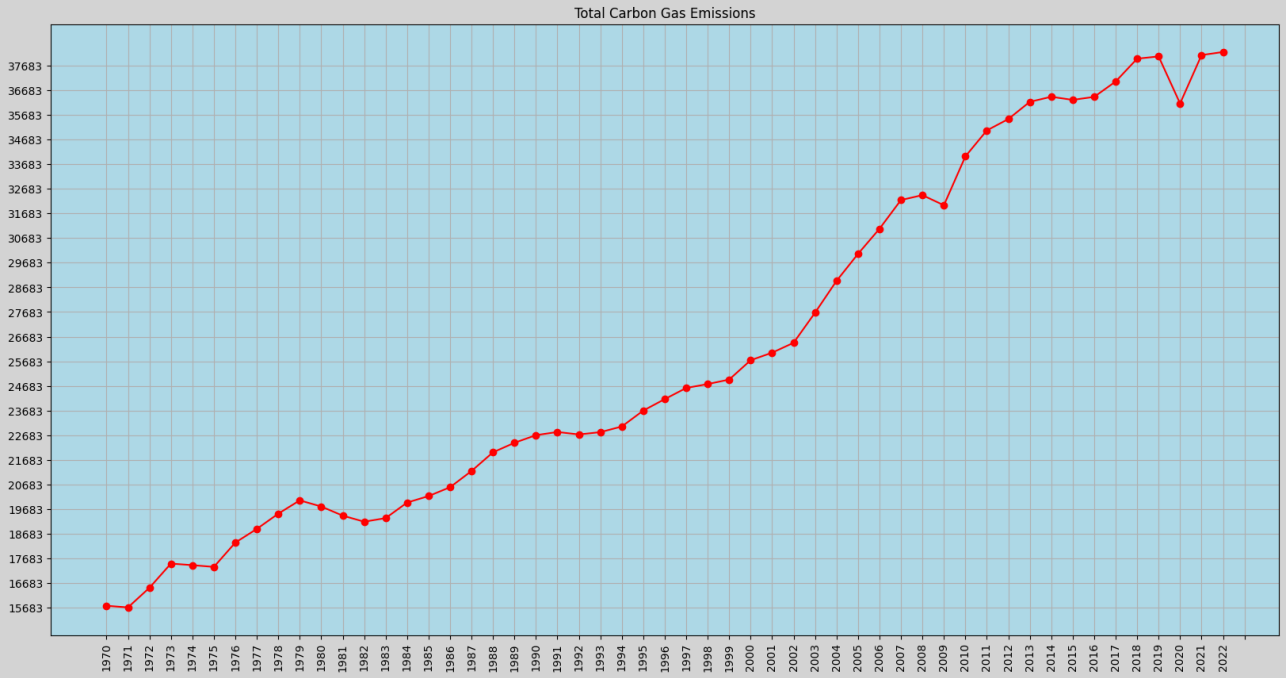
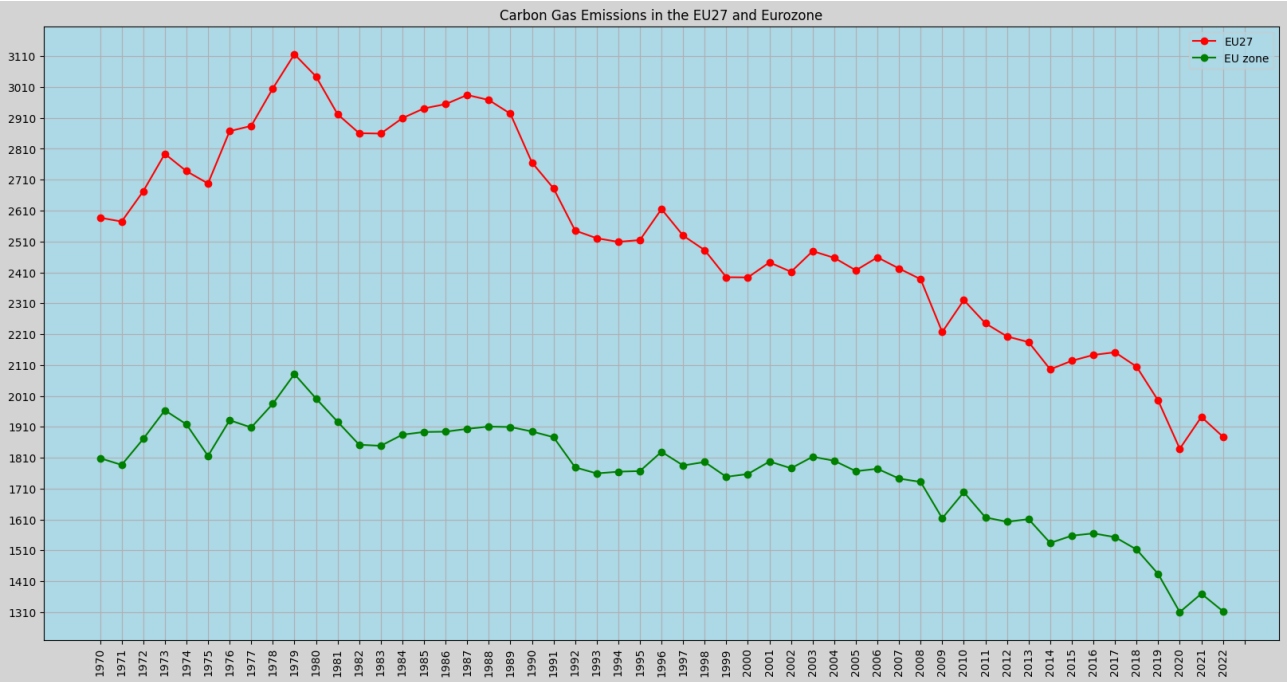
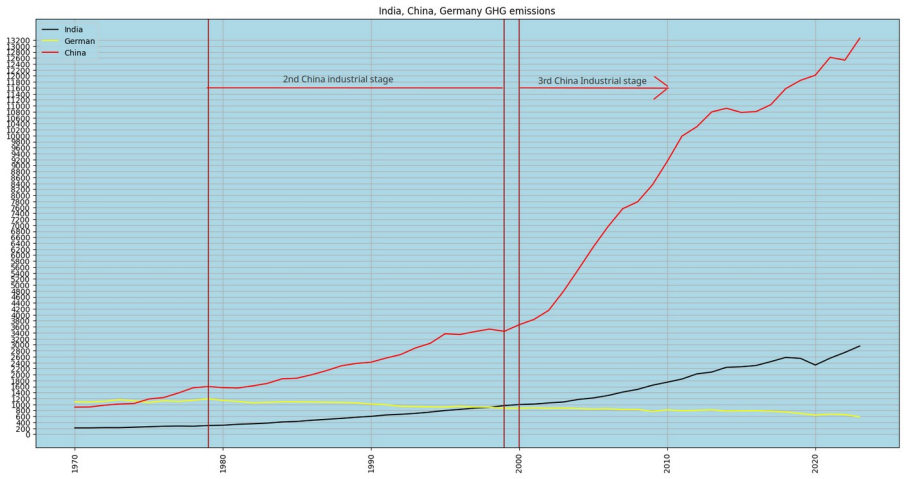
Overall, greenhouse emission levels have increased considerably since 1970. According to the data, the increase was around 231,2%. In contrary to that, European and Euro area countries are reducing their greenhouse emissions. The decrease was modest but consistent after 1990. It was on average around 1-1.5 % each year. Increase in the GHG emissions could partly be explained by the industrialization of the Asian and South American economies. The decrease in EU emissions could partly be explained by the increase in reusable energy usage and decreased usage of nuclear energy.





The European strongest economy, Germany, is reducing the GHG emissions while nations such as China or India are increasing their levels. In the chart below we can see the trends. According to the **Perplexity** China Industrialization process is categorized into 3 main stages:

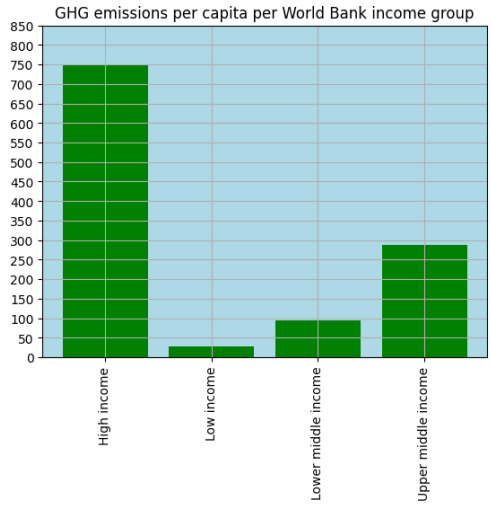
- First Stage (1953 – 1978). Heavy industry focus, agriculture
- Second Stage (1979 – 1999). Policy shift on market-oriented approach
- Third Stage (2000 – Present). Focus on heavy industry and data centers.



High-income countries are the biggest sources. Word bank categorization of income sources is done as follows:

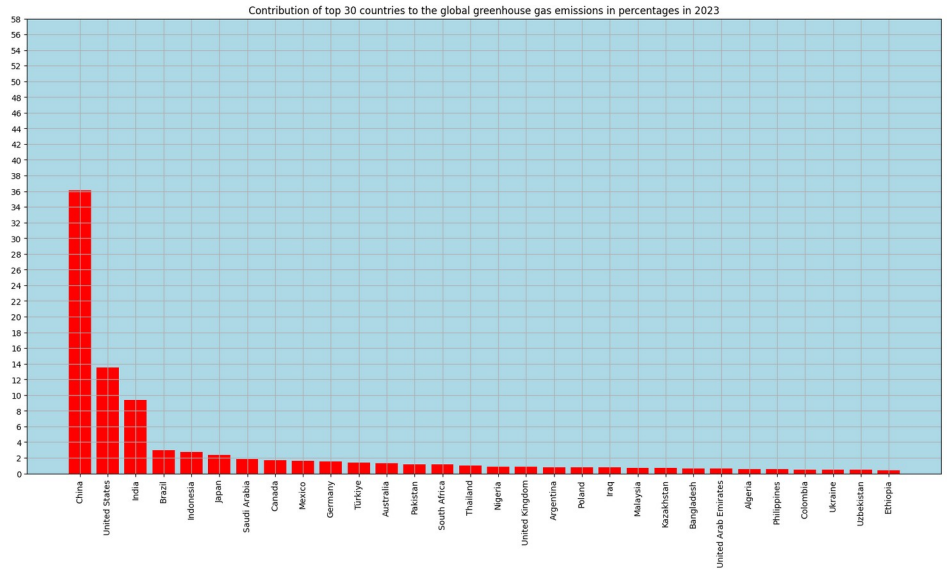
- **Low-income countries**: GNI per capita of $1,145 or less.
- **Lower-middle-income countries**: GNI per capita between $1,146 and $4,515.
- **Upper-middle-income countries**: GNI per capita between $4,516 and $14,005.
- **High-income countries**: GNI per capita of more than $14,005

We can see a consistent increase of GHG emissions by jumping between different income categories but there is a considerable increase of the GHG emissions in the High Income category. This category has an unbounded range and it seems that there are considerable differences in emissions in this category. Probably emissions are distributed by distributions from the power law family.

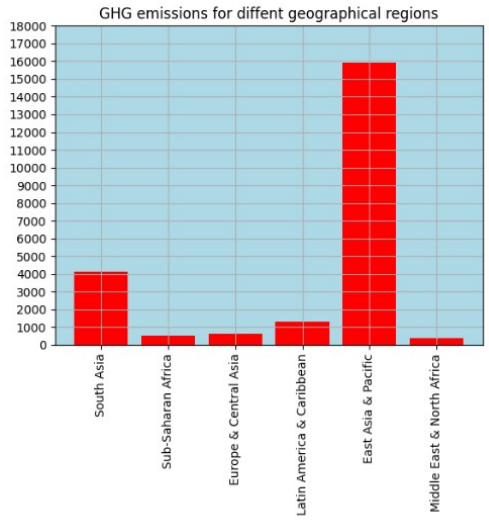


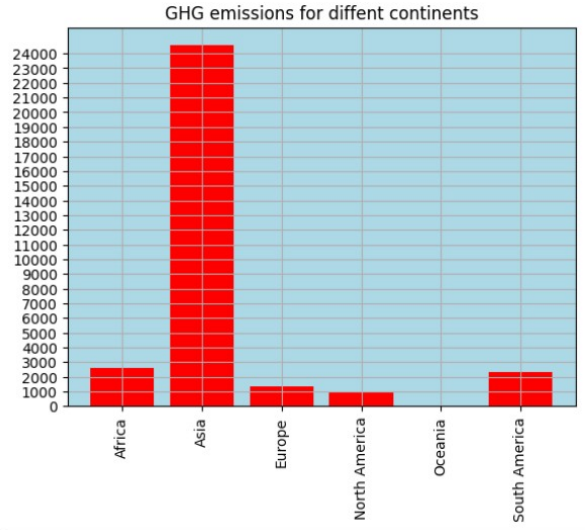
On the chart below, we can see the percentage contribution of the total green house emissions in 2023. Of course, the most populated countries in the world have the biggest GHG emissions. According to the Perplexity the ranking of the most populated countries in the world in 2023. are:

- **India**: ~1,4 billions
- **China**: ~1,4 billions
- **United States**: ~340 millions
- **Indonesia**: ~280 millions
- **Pakistan**: ~240 millions



The geographical distribution according to the regions and continents speaks a similar expected story. Asian nations have the biggest impact on GHG emissions.





Conclusion

In conclusion, we can see a considerable increase of GHG emissions by the emerging or non-Western (Euro + Anglo-Saxon nations) economies. Some of these emerging economies are South America, Eastern Asia, Russia and the Middle East.