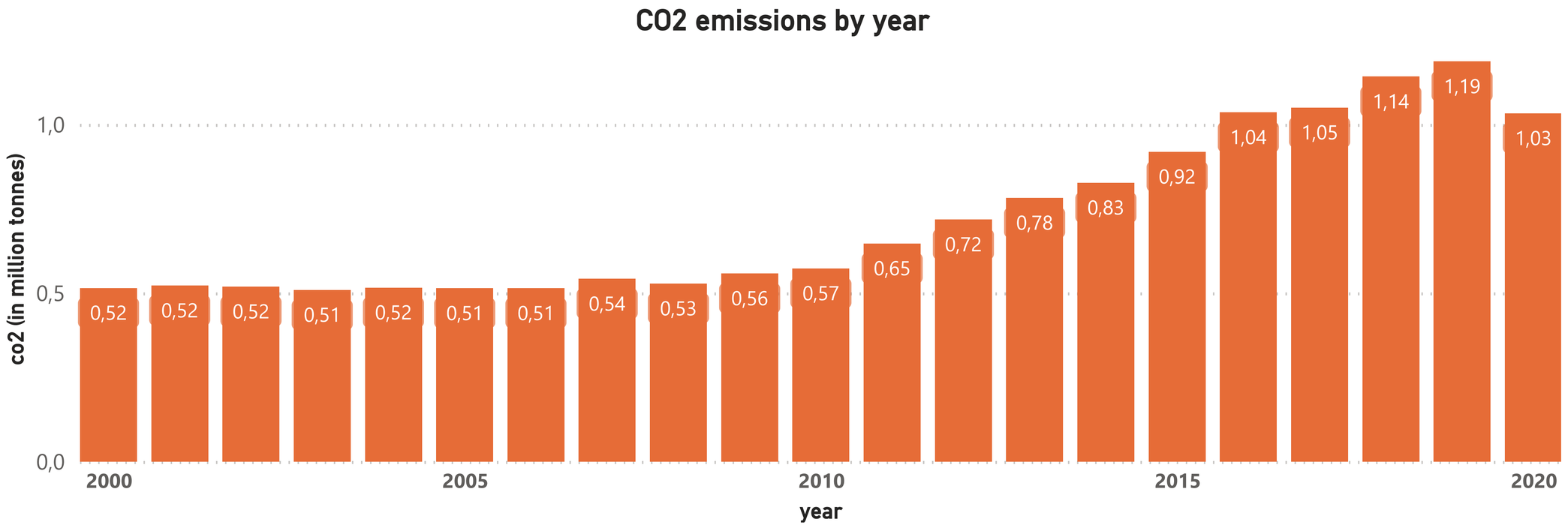
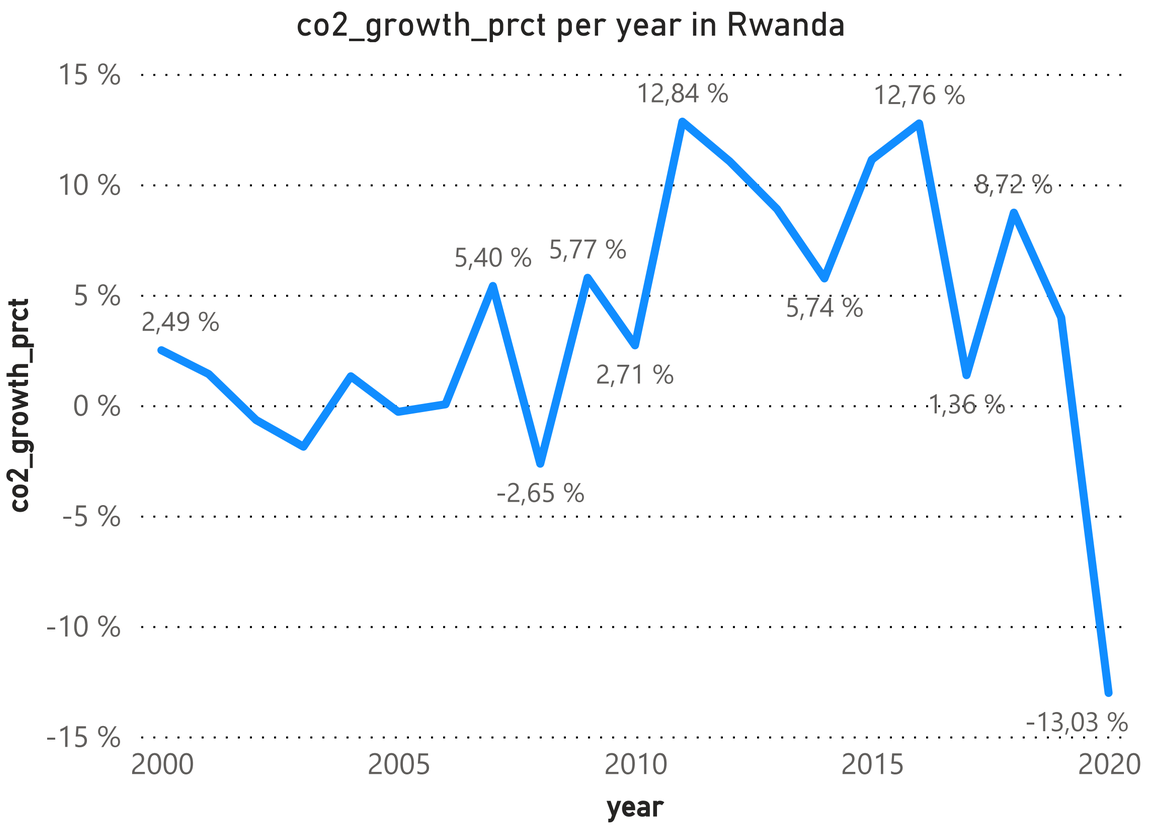
How many production-based tonnes of carbon dioxide (CO2) did Rwanda emit each year from 2000-2020?



The data above shows the annual production-based emissions of carbon dioxide (CO2) in Rwanda, measured in million tonnes. This is based on territorial emissions, which do not account for emissions embedded in traded goods.

The lowest number of emissions of C02 in Rwanda in the period 2000-2020 is 509,000 tonnes. This is the value of year 2003.
Over these 20 years, 2019 has seen the highest number of emissions of carbon dioxide with a value of 1,187 million (or 1 187 000) tonnes.

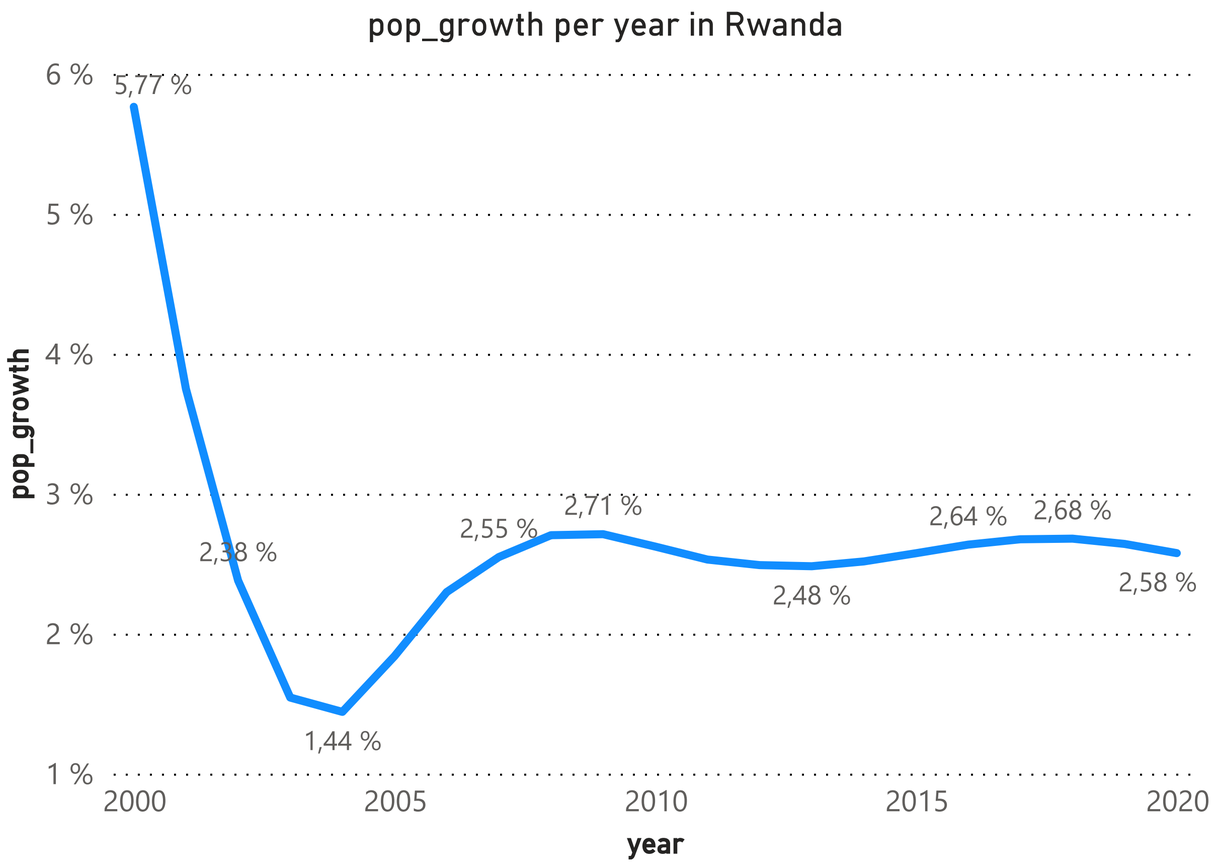
What is Rwanda's year-to-year change in carbon dioxide (C02) production-based emissions over these 20 years?



The graph above shows the evolution of the C02 emissions (in %) in Rwanda over the period 2000-2020.

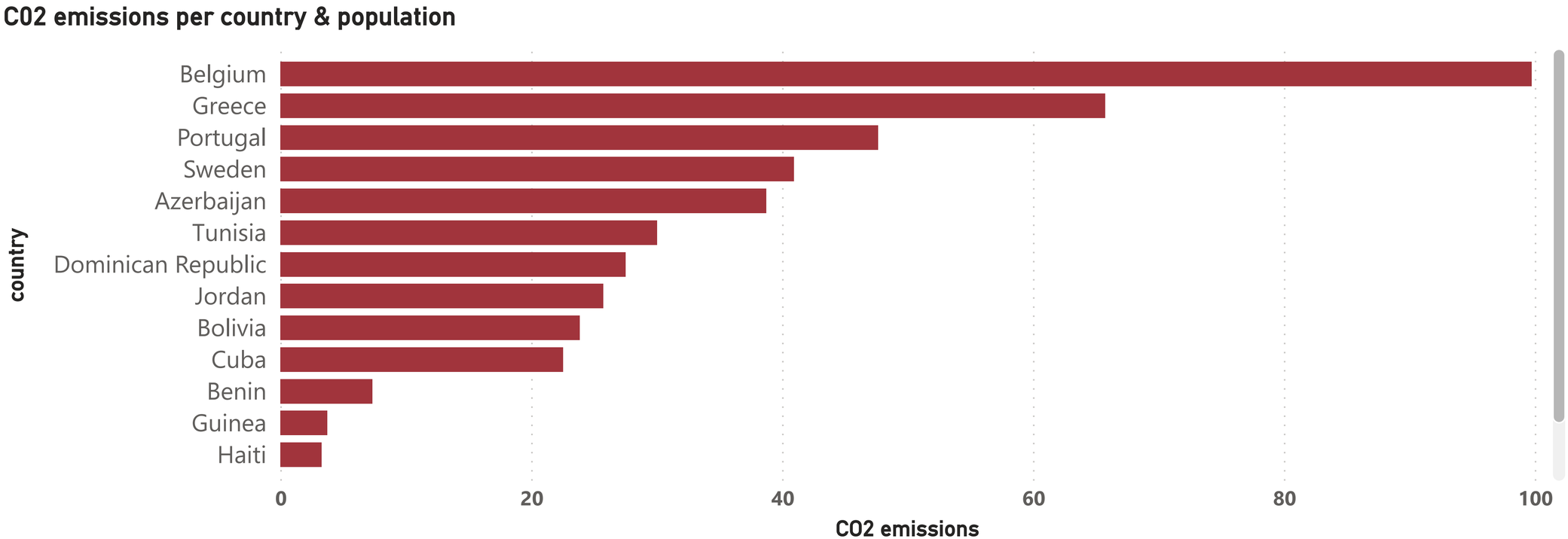
The highest increase over the 20-year period was in 2011 when the carbon dioxide emissions increased by 12,84% in comparison to 2010.
Another high surge of C02 was in 2016, with a rise of 12,76%

Does the CO2 in Rwanda as the population increases?



It is difficult to see a pattern between population growth and c02 emissions when looking at both graphs. Rwanda's population has constantly increased over the period while the C02 has decreased for some years during period. Population is certainly a factor of c02 emissions as there is more energy demand and use but there are other elements that impact the co2 emissions (e.g. number of

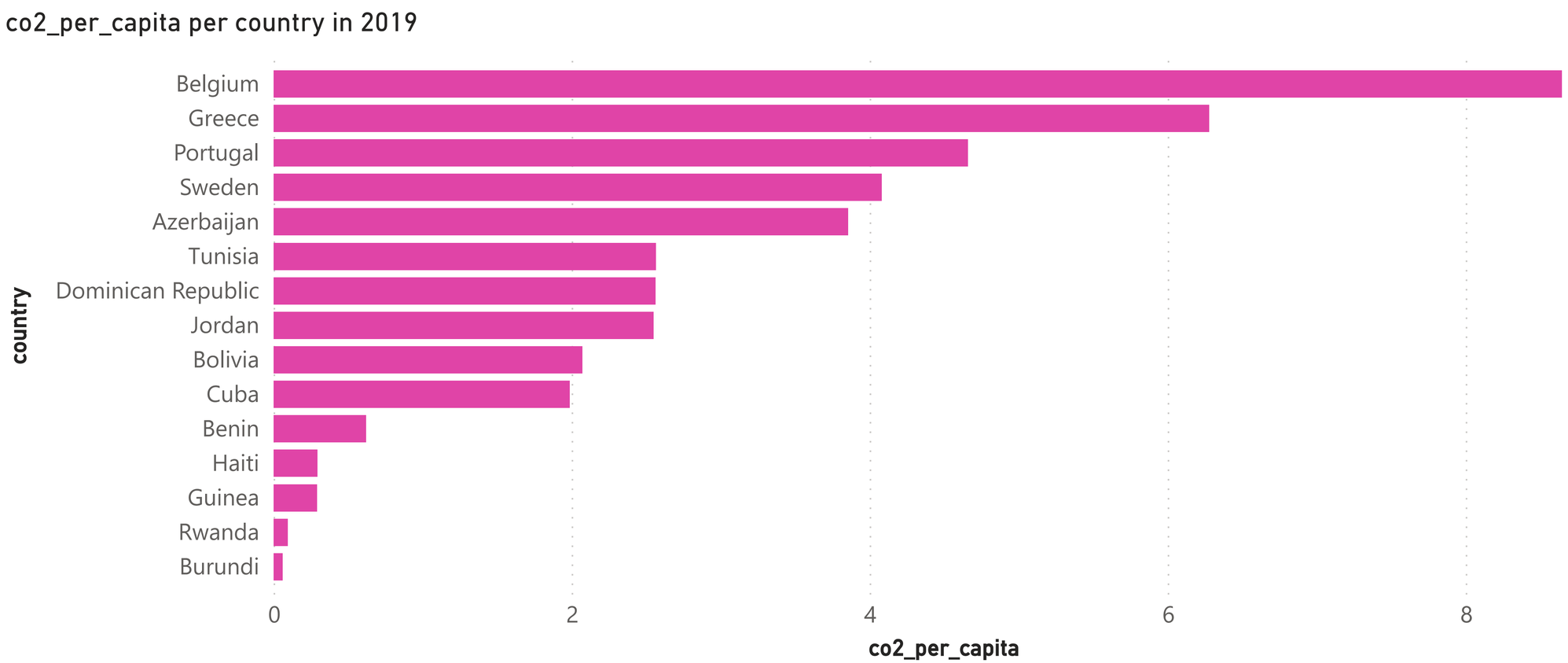
In 2019, how did Rwanda compare to other countries having the same or close population in terms of production-based emissions of C02?



I filtered the graphic above in a way that is shows production-based emissions for the year 2019. I omitted the year 2020 because of the pandemic. Indeed, there was less activity and also data for some countries is missing as collection may have been difficult. The countries displayed in the chart have a population between 10 million and 14 million, Rwanda having a pouplation of around 12.6 million .

The histogram shows that Czech Republic and Belgium emitted around a hundred million of tonnes of C02. These 2 countries have actually less population than Rwanda, who emitted "only" 1,19 million of tonnes of CO2. Another observation is that most the European countries have very high values while African countries emitted very little C02 in comaprison. This can be

What was the co2 per capita in Rwanda and countries with a close population during the year 2019?

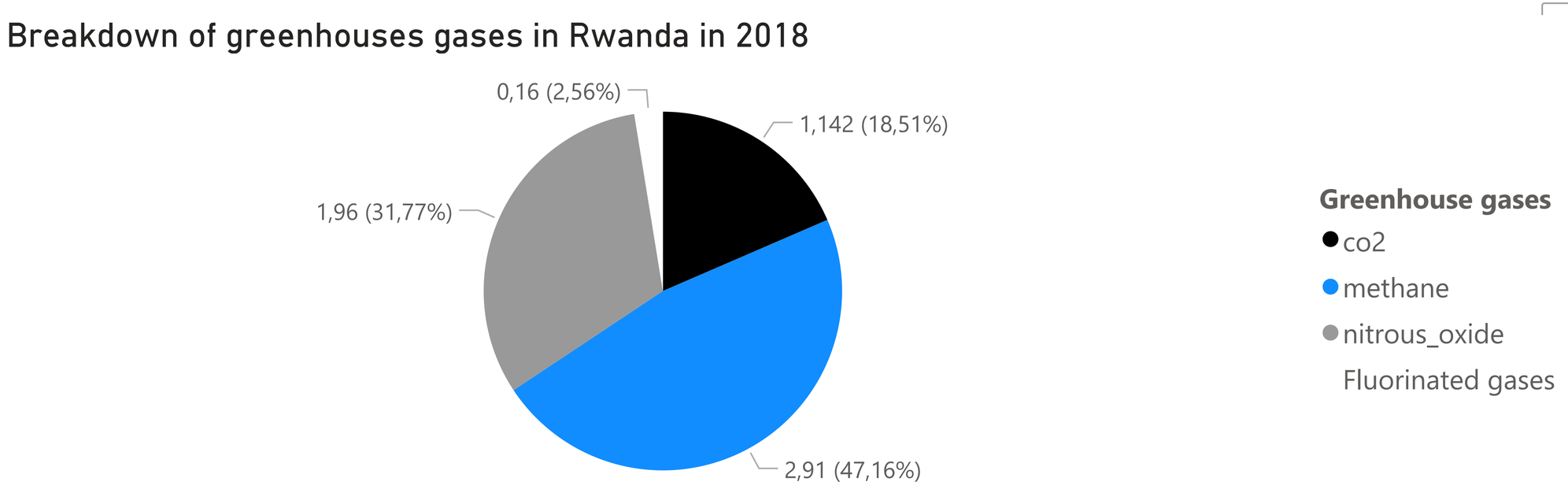


co2 per capita shows the annual production-based emissions of carbon dioxide (CO2), measured in tonnes per person. This is based on territorial emissions, which do not account for emissions embedded in traded goods.

Siimilar to the last graph, the values are higher for the European countries. There is more energy use in these countries. On the histogram, Belgium's co2 per capita in 2019 was 8,64 millon tonnes. It was then followed by 4 European countries that Greece (6,28), Portugal (4,66), Sweden (4,08) and Azerbaijan (3,85).

Rwanda is second to last on the histogram with co2 per capita amounting to 0.09 millions tonnes in co2. The co2 emission per person is very low

What were Rwanda’s total greenhouse gases emissions in 2018? What was the percentage of carbon dioxide, methane, nitric oxide and fluorinated gases relative to the total greenhouse gases emitted?

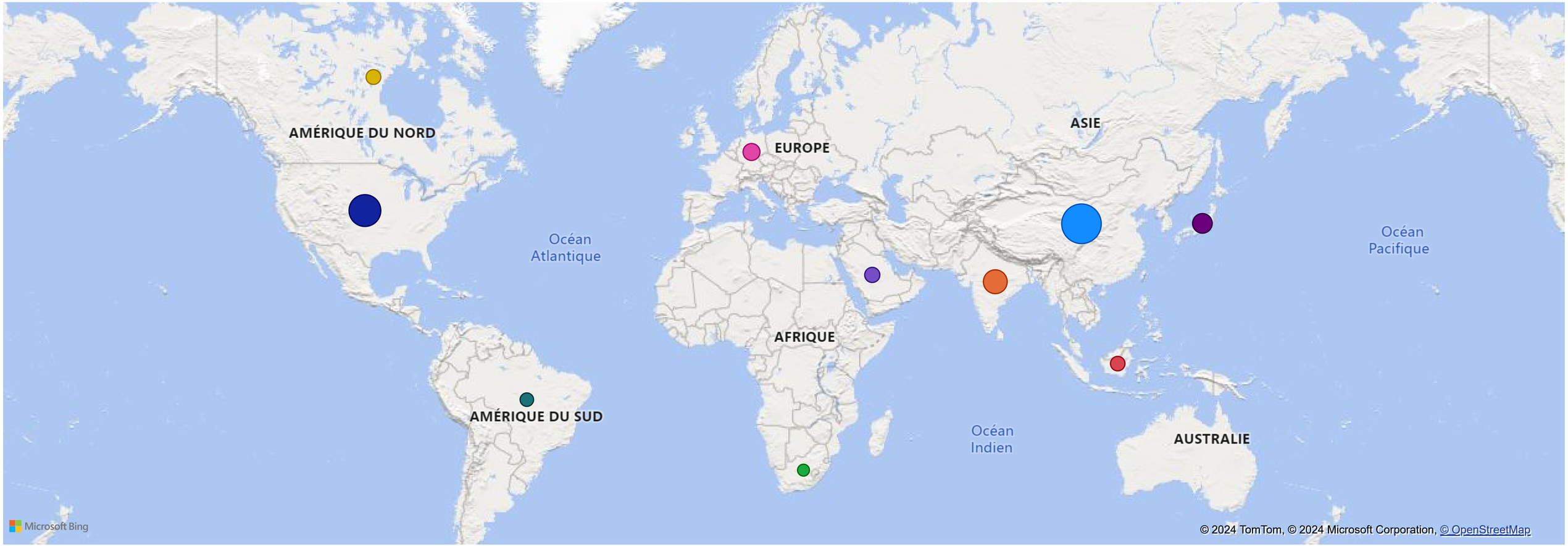


Data of Rwanda's greenhouses gases for the years 2019 & 2020 is not available in the dataset. This is why I made designed my graphic based on the year 2018.

In 2018, Rwanda's total greenhouse gases emissions amounted to 6.17 million tonnes. 47.16% came from methane which is about 2.91 million tonnes. 31.77 % of the greenhouses gases emitted was nitrous oxide and carbon dioxide constitued 18.51% of emissions. Finally, fluorinated gases (e.g. Hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone) represented only 2.56% of the greenhouse gases emissions (0.158 tonnes).

What are the 10 countries with the most C02 emissions over the period 2010-2020?

Top 10 countries with the most C02 emissions (2010-2020)



Countries China United States India Japan Germany Saudi Arabia Canada Indonesia Brazil South Africa

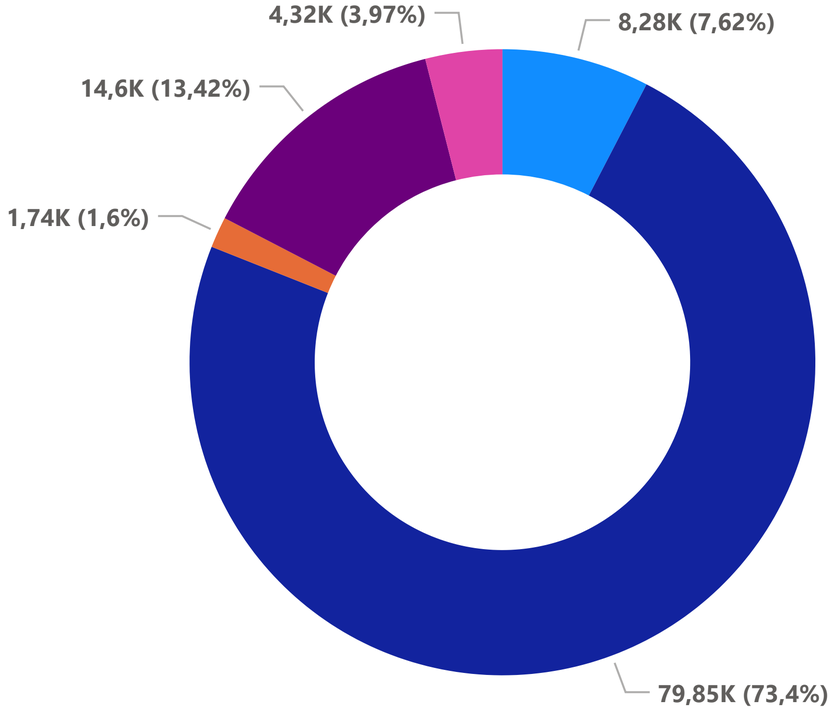
The bubble sizes show how much C02 was emitted. The biggest bubble represents China, who emitted 108 796 millions of tonnes over the 10-year period. The country is followed by the United States in 2nd (58 723 M of tonnes) and India in 3rd (24 396 M of tonnes) . Russia, Japan, Germany, Iran, South Korea, Saudi Arabia and Canada respectively make up the top 10.

China is the country with the most prodcution based CO2 emissions over the period 2010-2020. From which industries came these emissions and what is their percentage relative to the total emissions of CO2?

Total of the prodcution based CO2 emissions in China (2010-2020), measured in million tonnes

108,80K

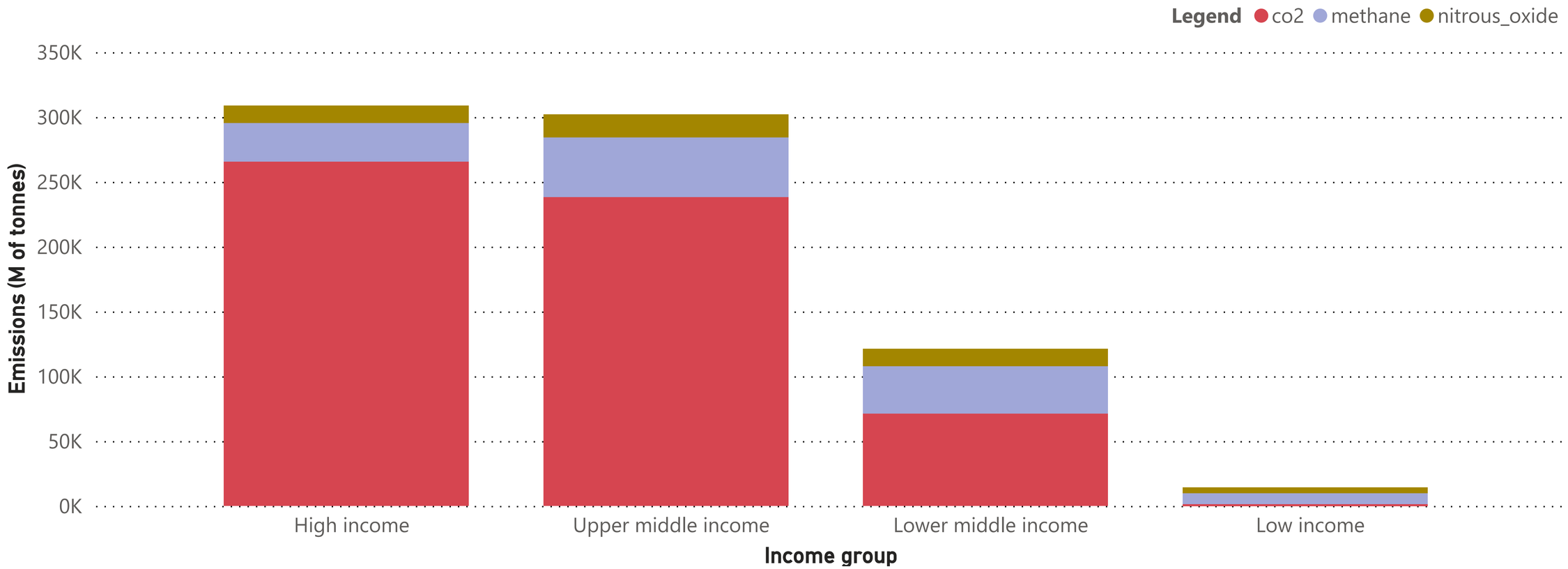
CO2 production per industry



As we can see on the pie chart most of the C02 emissions in China during the 10 year period came from coal. 79,85K million tonnes of coal were emitted between 2010 and 2020. It represents around 73 % of the total emissions.

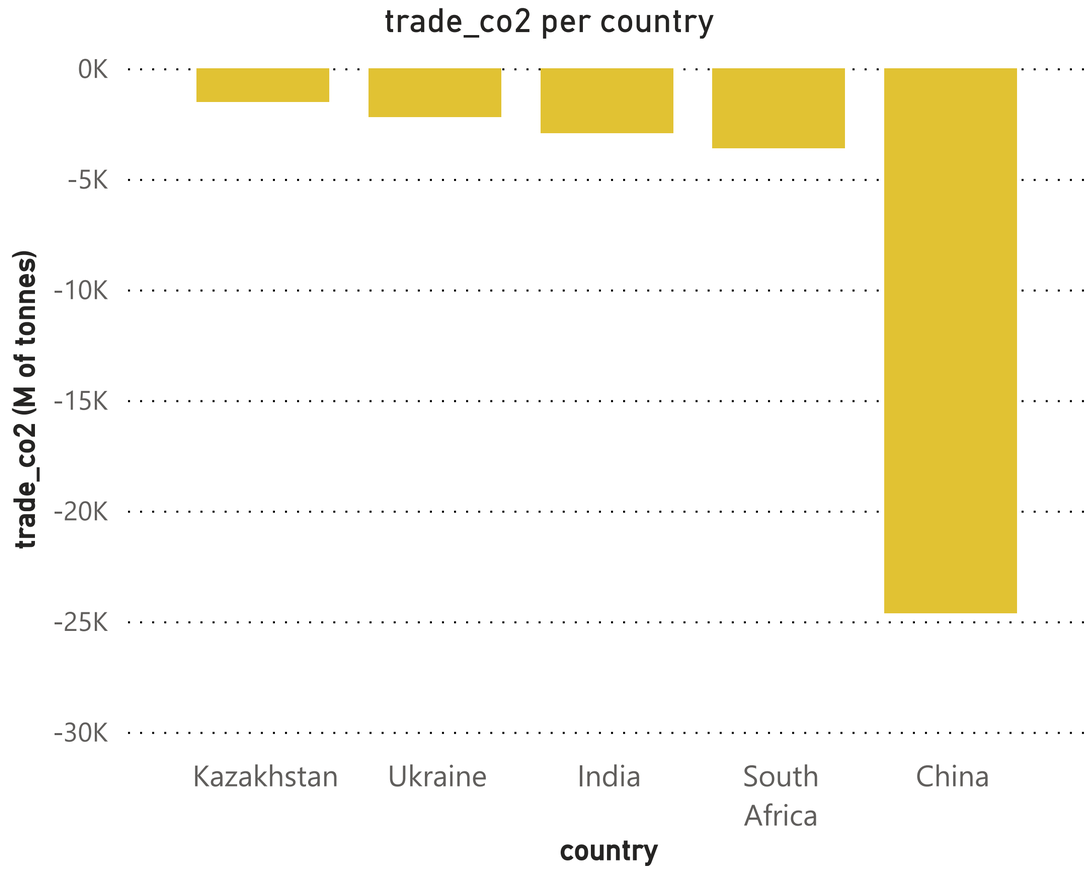
In second, we have oil, which accounted for approximately 14% of the total emissions of C02. during the 10 year span.

What were the greenhouse gases emissions per income group over the last 20 years (2000-2020)?



On the above histogram, we can observe that countries classified as high income and upper middle income have discharged around 300 000 millions of tonnes of greenhouse gases (ghg) in the air over the past 20 years. In comparison, lower middle income countries haved released around 120 000 millions of tonnes of ghg while low income countries emitted less than 20 000 millions of tonnes in that same period. Therefore we can see that there is a relationship between the income group of countries and their ghg emissions. Carbon dioxide represents the biggest emissions in high and upper middle income. The total C02 emitted by "high income" countries over the 20 year period amounts to 265 530 million tonnes. The upper middle countries have released 238 259 millions of c02 in the air. Another observation made is that upper middle countries are the ones that discharged the most methane and nitrous oxide in the

Who are the 5 net biggest importers and exporters of carbon dioxide over the last 30 years (1990-2020) ?



The column trade_co2 represents the net carbon dioxide (CO2) emissions embedded in trade, measured in million tonnes. Net CO2 emissions embedded in trade is the net of CO2 which is imported or exported via traded goods with an economy. A positive value denotes a country or region is a net importer of CO2 emissions; a negative value indicates a country is a net exporter.
The left histogram shows the top 5 net importers while the right one shows the 5 biggest net exporters over the years 1990-2020.

The United States is the biggest importer of co2 over the last 30 years, with 6969,31 millions of tonnes imported. The country is folllowed Japan, Germany, UK and France respectively. Meanwhile, China is the biggest net exporter with 24 634 of co2 exported. This value is much higher than the one of South Africa, which is the second biggest exporter of c02 with 3 603 millions of tonnes exported. India, Ukraine,