

Figure 1: Gender wage gap in 2015 ([Source](#))

- Which three countries have the lowest gender wage gap?

Costa Rica, Belgium and Denmark have the lowest gender wage gaps.

- Which three countries have the highest gender wage gap?

Korea, Japan and Chile have the highest gender wage gap.

- Do some research on the country with the lowest gender wage gap and comment on why you think it succeeded in achieving a low gender wage gap in 2015 (max. 150 words).

According to the OECD in 2015 Costa Rica was the country with the lowest gender wage gap. The Costa Rican government are committed to implementing policies promoting gender equality. In 2015 33% of seats in parliament were held by women, which has increased to 45.6% in 2021, this greatly affects the direction of political decisions. In 2016 SYKES Women in Technology was launched. The program facilitates women's participation in the technology sector. From 2016 to 2021 the percentage of those in the tech industry in Costa Rica who were women went from 13.5% to 40%.

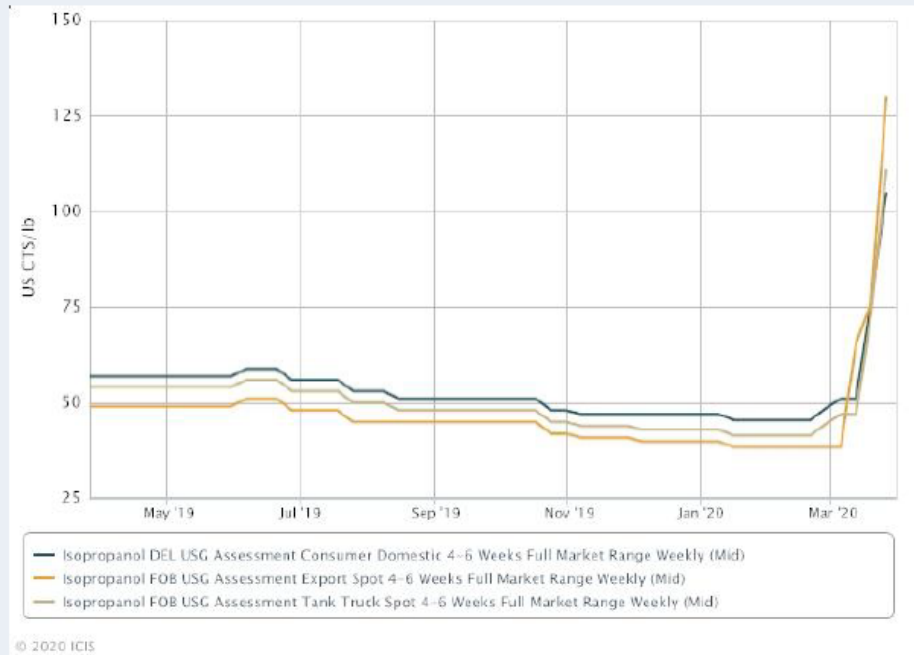


Figure 2: Isopropanol sales from May 2019 to March 2020 ([Source](#))

- Explain what is happening in the graph during March 2020 with regards to isopropanol sales (max. 100 words).

Figure 2 shows the rate of change in the price per weight of isopropanol in the US from May 2019 to March 2020. The price of isopropanol was steadily falling from around 50 cents per lb to around 40 cents per lb from May 2019 to the start of March 2020. Then in early 2020, by the end of March 2020 that price had tripled to around 120 cents per lb.

- Describe a possible reason for the observation you made about isopropanol sales in March 2020 (max. 100 words). Hint: Isopropanol is the main ingredient in hand sanitiser.

In March 2020 the US had its first noticeable increase in COVID-19 cases. Large amounts of the American population took action to protect themselves against the virus, one such action was purchasing hand sanitiser. This greatly increased demand for hand sanitiser and therefore isopropanol too as it is a major ingredient of hand sanitiser. This increase in demand drove up prices per lb of isopropanol to the point where it had tripled within a month.

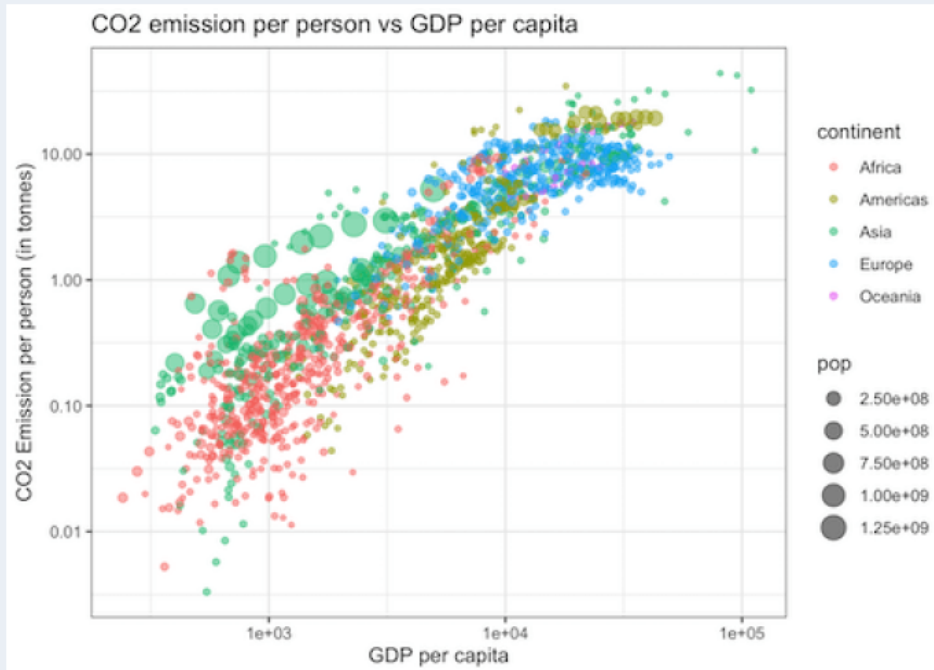


Figure 3: CO₂ emissions per person vs GDP per capita

- Discuss the relationship between CO₂ emissions per person and GDP per capita for each continent listed in the figure legend (max. 350 words).

There is a positive correlation between a country's GDP per capita and its carbon dioxide emissions per person across all continents. The majority of European countries are at the higher end of the GDP per capita globally and also have the highest CO₂ emission per person. The Oceanic countries follow the pattern of most European countries with both high GDP per capita and high CO₂ per person. Amongst the Asian countries there is more of a split. Those with the largest populations have the highest CO₂ emissions per person, this is still however, relatively low compared to European countries. Asian countries tend to have a lower GDP per capita, but it is important to note that a few Asian countries with smaller populations stand out as both those with the largest GDP per capita and biggest CO₂ emissions per person. It is also Asian countries with small populations which populate the opposite end of the spectrum. However, African countries make up the bulk of these countries. The African countries show the strongest correlation between GDP per capita and CO₂ emissions per person, although most are on the lower end of the spectrum for both. Within the Americans there is again a split between countries with a higher population and those with a lower population. Those with the higher populations have some of the highest CO₂ emissions per person in the world but with similar GDP per capita to most European countries. Those with smaller populations mirror similar correlations between GDP per capita and CO₂ emission per person to the majority of African countries but are slightly higher for both.