Global Trends: CO2 Emissions in the Climate Crisis

The current and future global trend that is of greatest important to me currently is the increase of carbon emissions (CO2) that has devastating impacts on climate change and degradation of Earth's resources via temperature change. According to 2021 data, there is 37.12 billion tons of CO2 emissions worldwide, with China at the largest emissions of 11.47 billion tons of CO2 emissions. Comparatively to two decades ago (2003), where 27.65 billion tons of CO2 were emitted globally, increasing by 10 billion tons in that span (Roser, 2021). Increases of carbon causes an increase in the greenhouse effect that is one of the main contributors to global rising temperatures. These emissions are primarily from fossil fuels, such as oil, that are used for high return on capital investments for major countries and corporations. Land use change also contributes to the other main CO2 increase factor, which can include deforestation or other actions where land turnover can create carbon sinks that trap carbon in high quantities. Methane gas from waste also increases CO2 which is why it is relevant to limit beef consumption. (Viglione, 2022).

I ranked CO2 emissions as the global trend with greatest importance for two reasons. First, the emissions have not yet peaked which means that there will be future affects that we have not yet even discovered from climate change. Second, the rising temperatures have caused climate related migration due to food deserts, rising sea levels which cause flooding, and natural disasters that have had a major wake of damage in the last 5 years. Natural disasters also often hit the most vulnerable populations the hardest where low infrastructure and response capacity are available. Disasters such as cyclones in Zimbabwe, wildfires in Australia at the start of the pandemic, droughts in East Africa, flooding in South Asia, and droughts in Central America, all are aftereffects of the climate crisis (Oxfam, 2023). It also shows that the Global North (North America, Europe) who has not faced these natural disaster at the same caliber are not as invested in preventative measures to prevent climate-related disasters.

Actions that need to be taken to prevent the rising, or even plateau of CO2 emissions, include political and inter-national collaboration towards agreed limitations on carbon outputs as countries. The current cap and trade system has shown major limitations for accountability on as a global body. This will require countries to shift priorities from a GDP-driving agenda to sustainable indicators. There are needs to be private collaboration with these efforts through major companies with the highest CO2 emissions. This could be motivated through existing structures such as the United Nations National Assembly and peace and conflict groups. Although these action steps are vital to human safety and life on earth, the likelihood of a complete shift in country emissions is highly unlikely without some new motivation. There already is clear data on the increase of temperatures, as just one example, that prove the reality of our changing planet. Continuing to promote voices such as Greta Thunberg, a young climate activist, while concurrently being aware of those politicians and world leaders who cause misinformation around climate change is one small step towards higher unity in facing these issues.

References:

- Oxfam Int. 5 natural disasters that Beg for Climate Action. Oxfam International. https://www.oxfam.org/en/5-natural-disasters-beg-climate-action. Published May 25, 2022. Accessed February 1, 2023.
- 2. Roser HR, and M. Greenhouse gas emissions. Our World in Data. https://ourworldindata.org/greenhouse-gas-emissions. Published 2021. Accessed February 1, 2023.
- 3. Viglione G. Land-use change has affected 'almost a third' of world's terrain since 1960. Carbon Brief. https://www.carbonbrief.org/land-use-change-has-affected-almost-a-third-of-worlds-terrain-since-1960/. Published May 11, 2021. Accessed February 1, 2023.