Reflection paper - Climate change

Four students, all belonging to the Generation Z cohort and enrolled at Lund University, convened on a Sunday afternoon to chat over a coffee. Among them was Magdalena, who took a Global Sustainability course during the spring semester. She proposed a discussion with her friends on the topic of climate change and its potential ramifications over the next century. Specifically, she asked: "What are the possible impacts of global warming over the next century, maybe in 2123, a hundred years from now? Her friends, Tree, a business economics student, Sun, an economics student, and Water, pursuing strategic communication, did not hesitate and eagerly responded "yes," and the discussion ensued.

Tree initiated the discussion by citing his knowledge that the sea level rises by approximately 3 millimeters annually, attributing this phenomenon to the melting of icebergs in the Northern Arctic region, a consequence of global warming. He emphasized that this will have profound implications for islands, coastlines, and the inhabitants of these areas over the course of the next century. Water interjected Tree, highlighting the specific case of the Maldives, which she noted has a maximum elevation of only ca 5 meters, rendering it vulnerable to being submerged by rising sea levels, necessitating the relocation of its populace. Tree concurred, citing similar concerns for Bornholm and potentially other islands in the Stockholm archipelago.

The melting of ice masses also has potential consequences beyond sea level rise. Tree pointed out that gasses such as carbon dioxide (CO2) and methane may be released into the atmosphere, further impacting the climate. He referenced a recent article in Svenska Dagbladet that highlighted the possibility of viruses and diseases that have been "trapped" in the ice for thousands, or even millions, of years being released into the environment. Tree cautioned that the lack of a cure for these potential illnesses leaves the human population vulnerable, and a new, more deadly pandemic could be imminent and around the corner.

Sun inquired about the projected effects of climate change on Sweden's climate. Tree pointed to the Gulf Stream and questioned the potential consequences of its shifting due to rising sea levels. Could this result in colder weather in Sweden? Sun responded with a colorful phrase - that it would probably become "cold as in freeeeeezing cold." Water added that higher temperatures, particularly near the Equator, may render certain regions uninhabitable in the future, citing examples such as the Mediterranean countries of France, Italy, and Greece, where extreme summer temperatures have already compelled people to flee their homes temporarily. She further speculated that people might need to relocate to cooler regions during the summer or even permanently in the coming years. Tree recounted how Sweden had already seen "climate tourists" from Germany seeking colder temperatures in northern Sweden last summer. Sun succinctly summarized the situation as "climate migrants," projecting that millions, if not

billions, of people, may be forced to leave their homes and seek refuge in other countries due to the effects of global warming over the next century.

Furthermore, Tree expressed his concerns about the impact of climate change on the ocean's biodiversity, particularly in the context of the Baltic Sea, known as one of the most polluted seas in the world. He emphasized that the future state of the Baltic Sea could resemble that of a lake, necessitating adaptation, migration, or even extinction for the various species inhabiting it. Albin, who overheard the conversation from a nearby table, interjected, noting that the repercussions of climate change on the miniature animals at the bottom of the food chain, susceptible to environmental conditions, could be catastrophic as they are forced to migrate to higher latitudes.

Water shared her knowledge from a recent financial management course, revealing that Sweden ranks as the eighth country in the world in terms of consuming its resources at an alarming rate, typically occurring in April each year. Notably, Qatar claims the top spot, with Finland and Denmark also preceding Sweden in this ranking. This fact raises important implications, as Sweden, despite being a relatively small country, exhibits consumption patterns that may need to be revised in the long term. Such consumption patterns, emphasized Water, contribute to climate change and global warming, phenomena that are projected to have profound impacts on the world in the coming century. Magdalena further highlighted the issue of excessive meat consumption and its adverse effects on global warming. She argued that transitioning to a plant-based diet would be a more viable and sustainable choice for the future. In this context, addressing Sweden's consumption patterns necessitates a fundamental reorganization of the economic system, including a shift in the forces of supply and demand. Specifically, overconsumption and overproduction must be regulated to align with the notion of a single planet with shared resources rather than multiple separate entities (source, year).

Magdalena informed her friends and said this topic was discussed earlier in the global sustainability course, and the concept of "degrowth" was introduced by their lecturer. She explained that degrowth entails a radical rethinking of the current economic system and values, moving away from an emphasis on consumption and growth and prioritizing principles of equity and sufficiency (Hickel, 2021).

Towards the end of the discussion, when the coffee was in everyone's stomachs, Sun expressed his concern about the misconception that the problem of climate change would be resolved once financial interests were affected. They highlighted the fallacy of relying solely on capitalism, a significant driver of climate change, to solve the problem. Sun emphasized the need for proactive measures to address the issue, despite knowing the solution and not relying solely on hypothetical future innovations, such as climate-neutral energy, as a cure (Sovacool, 2016). Tree

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concluded by emphasizing the importance of pressure on countries and individuals with the greatest responsibility for CO2 emissions to effect meaningful change and reduce their environmental impact.

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References

Hickel, J. (2021). What Does Degrowth Mean? A Few Points of Clarification, Globalizations, 18 (7), pp. 1105–1111.

Sovacool, B. K. (2016). How long will it take? Conceptualising the temporal dynamics of energy transitions, Energy Research & Social Science, pp. 202-215.