

Assignment 2

It seems like every generation has had to face its own distinct adversities and dilemmas relative to their decade. From the 1990s and 2000s came the war against the Middle East for enforced democracy by the U.S. (as well as for oil), along with the fight against Aids in the 80s and the fight against Vietnam and Racism in the 60s. Recently, the economic competition between the U.S. and China has made headlines over which is the more powerful, but above all lies humanities most prevalent danger of all: Climate change. The consequences of CO₂ emissions grow everyday with our prevalent usage of fossil fuels. According to Joseph Nightingale (2019), while climate change has indeed occurred numerous times throughout the history of the planet, the burning of fossil fuels skyrocketed the phenomena, making today the highest in CO₂ levels in 3 million years.

Amongst the issues that sprouts from climate change are rising sea levels. In 2005 the U.S. could do nothing but stare at the mass destruction that came about Hurricane Katrina, the category 5 hurricane that wiped out the city of New Orleans, which was 10 feet below sea level to begin with. It might be alarming to hear that while it's already anticipated that cities like these and the coasts of Florida are on the brink of submergence, Residents of Los Angeles may face the same path over time. According to an interactive map of Los Angeles County (Wattenhofer, J. (2015) neighborhoods along Long Beach, Marina del Rey, as well as other coastal areas may have ocean levels seep in as soon as the end of the century. The interactive map demonstrates that while there may be little that can be done, by being efficient with emission cuts we can slow the risk of these endangered communities. Another consequence of climate change is shown in the increase in extreme weather. Increased carbon dioxide can result in water being more acidic and warmer, which in turn dissolves coral and other organisms in the ocean as well as drying up plants. And with warmer air comes greater potential in fires to manifest. An Article by Eric Holthaus (2009), explains how these occurrences have influenced affected biosphere such as the increase numbers of Humpback whales along the California coasts due to a need for krill and anchovies, which have migrated to the cooler

coast. In fact, it has been found that an array of coastal life has begun migrating North to escape the warming waters.

The issue of climate change is bad, but it doesn't have to turn for the worse. Today, we have expressed the need for change through current policy, movements, and initiatives that are tackling the problem head on. Amongst these solutions is the "cap and trade" system, carbon tax, The Green New Deal, Divestment and finance sector withdrawal from fossil fuels and investments in sustainable investment, and the usage and development of geoengineering. While all of these solutions cannot escape flaw, I believe that the efficient and fastest way of taking on this issue is through the implementation of The Green New Deal.

The Green New Deal is a strategy involving the 143 countries that are responsible for about 99% of global emissions (Benson, 2020) that strives towards an ultimate switch for renewable energy. By using solar, hydro, and wind energy sources that we have today, we are on the brink of great positive impact towards a better planet. The implementation of this technology by 2050, we can avoid a 1.5 degrees Celsius increase that could ultimately lead to travesty. One may argue that it is too expensive an initiative to take seriously. Afterall, 73 trillion dollars is a hefty price to pay, even if it is for the better of the planet. However, it is shown that it may be more expensive in the long run if nothing is done. As well, it proclaims to be able to supply roughly 30 million jobs in the future. The Green New Deal came to life by the efforts of Rep. Alexandria Ocasio-Cortez of New York and Sen. Ed Markey of Massachusetts, who despite backlash insists that in order to meet chronological goals that there has to be drastic measures taken by 2030 (Romm, 2019). They propose that measures similarly equated to the U.S. production of war vehicles during WWII might just be the step that needs to be taken if we want any chance of avoiding global disaster. In fact, it is stated that only with these sort of drastic measures taken, we will truly have a shot at going green by our 2050-2070 mark.

Another solution that has been proposed is the use of carbon tax. Carbon Taxing puts a price on the production of emissions with the expected result of companies producing less of it (Leonhardt, 2019). There is valid reason as to why this is a good solution. According to Henry Chu

(LAT, 2009), the use of carbon tax could level out the playing field when it comes to economic production. While the U.S. may decrease its usage of fossil fuels in car production domestically from Michigan, it can still outsource to places like China and India where the labor and environmental taxes are more relaxed or non-existent. By implementing this, the cost is the same no matter where it is distributed. However, the problem with carbon tax sprouts from the fact that is, after all, a tax. It's been shown that when the same carbon tax initiative was produced in Arizona and Nevada, the use of slight wording could have an effect on people's opinions on the tax. The bill couldn't pass in Arizona as it clearly stated that the bill was an expenditure taken away from taxpayers, which decreased its popularity drastically.

Another solution that was brought up was the use of "Cap and Trade". This sort of method is goal based, where "cap" is the goal (zero emissions). When a cap is made, there are limited allowances given to emission producing organizations, and in using less of these allowances, companies can trade their unused allowances to companies that need to produce more emissions. This ensures that the costliest emissions are being taken care of cost wise in order to reduce them. Allowances can either be auctioned off to bidding companies (said to be the most effective) or given for free by the government, being determined by a firm's past history with emission production (EBSCO, 2009). And while this does directly address the issue of companies abusing their power to better themselves over the health of the Earth, it might not prove as beneficial when you come to the idea that it may have been corrupted in the first place. While they do set clear, distinct guidelines, it is still bad in that you would have to determine the price of these allowances appropriately, otherwise there is no point of this system. An Opinion article by Jacques Leslie in the Los Angeles Times (Leslie, 2020) exposes the fact that in California, the oil industry has been given so many exceptions and ways around the rule that this system is not really working. In 2017 when discussing the extension of prop 26, legislators with major oil establishments in their jurisdictions were able to get a compromise that allowed oil refinery emissions to not be regulated. When the price of these allowances was not proportionally set yet, companies were able to buy off these permits that allowed them unwarranted amounts of emission production today. The market carbon price is \$17 a ton,

when in actuality it should be closer to \$40-\$80 in 2020, and even more expensive in the future. Although CA met their 2020 emissions goal 4 years earlier, this was spearheaded by cutting coal usage. CARB isn't doing a good enough job, being that its goal of reducing emissions 40% from 90's level emissions by 2030 is projected to happen by 2061. So, all in all, perhaps this could have been a good system had it not been flawed from the very beginning.

Thirdly, there is the idea of withdrawing investments that support the usage of fossil fuels and instead have it go towards renewable energy sources. It makes sense. By investing in renewable resources, we are able to promote its usage and make a turn-around for companies to begin going green. And while some may argue that suddenly turning away from fossil fuels may become a dangerous measure that can hurt the economy, it is also shown that there can be financial implications due to repeated floods, heat waves, and other consequences of climate change that can affect the economy as well. However, with the inconsistencies of climate change, it appears that market players don't take the issue seriously. At least not until there is a regular pattern that indicates climate change is a serious problem (which at that point may be too late). Additionally, there are government programs such as FEMA that these companies like to fall on which promotes companies to invest in ways that hurt the climate (Bolstad, Frank, and Gesick, et al 2020)

Lastly, there is also the use of Geo-engineering that could potentially remove the levels of CO2 from the atmosphere drastically. With glaciers melting (Jamail, 2019) and drastically rising ocean levels, it is understandable how this easy go-to method could potentially be what saves the planet at the most efficient rate. However, by implementing geoengineering to reduce the amount of carbon dioxide in the air, this could in fact have the opposite effect on wildlife and water resources. BECCS involves burning biomass such as trees and crops to produce energy while capturing the CO2 emissions before they transport in the air. Basically, by solely going for the reduction of CO2, we are compromising biodiversity, as well as the carbon cycle, according to Dr. Vera Heck. In addition, due to the large amount of land needed for these BEECS plantations, we risk less natural habitats and biodiversity It also discusses Solar Radiation management, where according to researchers, while SRM's may lead to an increase or decrease in temperatures, if we were to

suddenly stop they can as well rebound fairly quickly, which would be globally catastrophic (Dunne, D. (2018)

The Green New Deal is then the clear solution towards the betterment of this planet. Of course, if there were an “all of the above option” when it came down to picking which method was more effective, then all of these solutions could have the potential of helping the U.S. reach its goal of running solely on Renewable Energy.

References:

- Benson, T., (2020). "The Green New Deal would create nearly 30million jobs — study" *Inverse*. Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/the_green_new_deal_would_create_nearly_30_million_jobs.pdf
- Bolstad, P., Frank, S., Gesick, E., Victor, D., (2020). "Markets are flying blind on climate change" *Brookings*. Retrieved from https://www.brookings.edu/blog/planetpolicy/2020/09/16/markets-are-flying-blind-on-climate-change/?utm_campaign=Brookings%20Brief&utm_medium=email&utm_content=95425976&utm_source=hs_email
- Chu, H. (2009). "'Carbon tax' is sensible, and perhaps inevitable, advocate says" *Los Angeles Times*. Retrieved from <https://www.agricanto.org/uploads/5/2/6/3/52634281/carbontaxyes.pdf>
- Dunne, D. (2018). "Geoengineering carries 'large risks' for the natural world, studies show" *Carbon Brief*. Retrieved from <https://www.carbonbrief.org/geoengineering-carries-large-risks-for-natural-world-studies-show>
- EBSCO Sustainability Watch, (2009). "Cap-and-Trade Systems" *EBSCO Publishing Inc*. Retrieved From https://www.agricanto.org/uploads/5/2/6/3/52634281/cap_n_trade_explained.pdf
- Holthaus, E., Rolling Stone (2009). "The Point of No Return: Climate Change Nightmares Are Already Here" *reader supported news*. Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/warming_nightmare_is_here.pdf
- Jamail, D., (2019). "We Are Destroying Our Life Support System" *Truthout*, 1-5. Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/we_are_destroying_our_life_support_system.pdf
- Leonhardt, D. (2019). "The Problem With Putting a Price on the End of the World" *The New York Times*. Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/the_problem_with_putting_a_price_on_carbon.pdf
- Leslie, J., "Cap and trade isn't cutting it" (1/2/20) *Los Angeles Times* Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/cap_and_trade_isnt_cutting_it_1_9_20.pdf
- Nightingale, J., (2019). "Seven Points You Need to Know About Climate Change" *BigPicture News*. Retrieved from <https://medium.com/bigpicturenews/seven-points-you-need-to-know-about-climate-change-73e0d7f5b6a7>

Romm, J., (2019). "Ocasio-Cortez says we need World War II-scale action on climate. Here's what that looks like. Winning WWII wasn't socialism. Neither is the Green New Deal." *Think Process*. Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/ocasio-cortez_says_we_need_a_ww2_plan.pdf

Wattenhofer, J., (2015). "Map Shows Parts of LA That Could be Underwater If Nothing's Done to Stop Climate Change" *Curbed Los Angeles*. Retrieved from https://www.agricanto.org/uploads/5/2/6/3/52634281/map_shows_parts_of_la_that_could_be_under_water_if_nothing.pdf