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## Make the Planet Green Again

When thinking about what we can do, as a school and local community, for environmental sustainability, grief struck me. Not because we can't make meaningful change to the environment near us, but because of our inability to affect the monumental dangers of climate change. I have realized, that with the limited time we have to alter course, individual actions, despite their best intentions, can no longer be the solution. The only solution is a top-down strategy from the government. Therefore, the onus is on us to educate those around us to use their vote to elect politicians that will implement a powerful agenda that will help avert the disastrous future we face.

The significance of rising global temperatures is often understated. A five-degree Celsius drop in global temperatures 20,000 years ago, left North America under glaciers, and "25% of the land" of the Earth covered in permanent ice (USGS). The goal of limiting global temperature increase to no more than 1.5 degree Celsius, seems reasonable, when compared to this climatic difference. If not addressed, climate change could "leave a billion or more" people displaced and refugee (UN). To put this in perspective, a displacement of 6.2 million refugees during the Syrian Civil war was considered a major crisis. Other effects from climate change include "1 million species of animal and plants" facing extinction, droughts becoming more severe, and increased global hunger.

It's our responsibility to the environment and each other, to elect politicians that will lead our country to being carbon neutral in the next 10-20 years. Our Congress needs to pass legislation envisioned by the Green New Deal, a bill that outlines goals to transition to green energy and reach zero net emissions. Specific investments need to be made to transition to a renewable economy. We have market incentives, cost incentives, and individual support to pass legislation that transitions us to green energy.

Transportation was the largest contributor to greenhouse gas emissions in 2018 (EPA). Electric vehicles are a long-term solution to these emissions. Electric cars have already caught up and somewhat surpassed gas-powered cars. Even though initial cost may be higher, a University of Michigan's study found that on average, electric cars cost less than half as much to operate a year than gas cars and it's rapidly becoming cheaper and more efficient every year. Most important, it releases zero tail pipe emissions. To cut almost all emissions, fossil fuels need to be replaced as the provider of energy for charging. green energy. Our government would need to provide sufficient direct investment and subsidies in order to incentivize continued technological developments, demand and build out a national network of charging stations.

Wind energy power is the most green and efficient of our current renewable energy. A single windmill can produce as much power as over 48,000 solar panels. In Montana, Judith

Gap, a wind facility, spends 3.1 cents per kilowatt-hour of energy produced, compared to 6.4 cents per kilowatt hour for a fossil fuel plant! (Montana Public Service). The Department of Energy Vision reports says “growing wind energy to supply 20 percent of U.S electricity by 2040, could support 380,000 jobs” ! Wind energy is more than double as efficient and creates jobs at the same time.

The cost of shifting to 100 percent renewables, is estimated at \$4.5 trillion (Wood Mackenzie). This number keeps dropping as the technology improves each year. Furthermore, a recent study found that 100% renewable energy for the U.S, would save \$321 billion a year. Renewables is necessary, and pays for itself in a short amount of time.

You might be thinking, something isn't right. Are these technologies not as good as I'm painting them? No, what's going on is that the Oil and Gas industry, spent well over 100 million dollars on lobbying and nearly 100 million dollars contributing to various political campaigns in 2019 alone! In 2015, the U.S. subsidizes, defined as fuel consumption times the gap between existing and efficient prices (i.e., prices warranted by supply costs, environmental costs, and revenue considerations”) for the fossil fuel industry exceeded “\$649 billion”. Worldwide subsidized fossil fuels by “ \$4.7 trillion” , approximately 6.3 percent of global GDP” (International Monetary Fund). Without the propping up of fossil fuel, the transition to renewables would be swift.

Is all hope lost? No, we are blessed to live in a country in which citizens can affect policy through their votes. The most effective strategy for us to fight the beast of climate change, is making sure those in our schools, neighborhoods, and communities are educated about the impending climate disaster. It's all of our responsibility to elect politicians, who will pass legislation that will allow a fast and necessary transition towards a green economy.

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