

## Midterm Essay

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Global warming has raised public awareness during the past 2 decades and this can be fatal to the whole mankind. Our generation and future generations may not be able to see the great icebergs in the north pole. My great grand kids may not be able to understand how the great Titanic sank, they may not understand the romantics of Jack and Rose since freezing to death might not be an option anymore in the future. Due to global warming the future generations might only witness polar bears on coke cola cans and see the snow trucks in the historical car museums. Our decedent will never understand how salting the road will aggressively damage our beloved vehicles. I remember my father always told me that how cold the winters were 50 years ago when he was a child in Beijing, China. Most of his friends lost their ears and toes due to the extreme cold weather. It is crazy tale in current days, since we barely see snow in Beijing anymore. I believe that this story will not exist anymore in the future if we do not change the current situation. At the winter of 2014, when I first came to Michigan, I witnessed the craziest amount of snow of my whole life. Snow was covering above my knees when I first walked outside. The amount of snow has been decreasing rapidly ever since.

Global warming and climate change will also impact our industries hardly. First, the temperature will rise globally, which means more and more AC units will be operating more frequently. Most AC units requires Freon, which is very bad for the environment. This will even accelerate the global warming exponentially. Climate change will also decrease the diversity of seasons, which will eliminate job opportunities. For instance, there will be absolutely no snow truck drivers. Companies making snow gears will go out of business. Like the Arctic Trucks company, a company based in Iceland focusing on making trucks designed to accommodate extreme snow weathers will be out of business. The great winter clothing brand Canada Goose, which sponsors gears to most scientific teams working in North Pole and South Pole will be out of business. Every single snowboarding and skying company and related businesses will have to reconsider their professional directions.

Optimistically, this will help most water related industries. Global warming will melt all of the icebergs and causing the rise of sea levels. Businesses related to water and water sports will reach their peak sale performance. Excessive number of surfers will occur globally, people will be surfing and sailing all over the world. The Earth will experience more water than ever.

The best technology to change the situation would be fuel cell energy. The fuel cell energy transforms chemical energy to electrical energy. The most common fuel cell type is using hydrogen as fuel and it will generate both electricity and fresh water. If the global warming really happens, fuel cell technology will be a big hit to the world. We can generate hydrogen from salt water (as an electrolyte), and use the same hydrogen to generate electricity and drinking water.

Another way to help the current situation is to develop a more efficient and long lifespan energy storage system. The most common energy storage system is battery. Currently, Li-ion battery is very common, but not at efficient. Scientists are developing high pressure solid state electrolyte batteries to accommodate the need of human transportation methods. Aqueous batteries with low voltage can also be very helpful in the future using the extra amount of water due to global warming to store energy.

In conclusion, everyone is responsible prevent and slow down global warming. Corporations should input more research fundings regarding energy storage system, fuel cell technology, and alternative energy. Civilians should stop abusing energy and natural resources like paper and fresh water. Recycling and regulate pollutions also play a big role of stop global changing. It is hard to discover a new helpful technology, but it is very easy to stop hurting out mother Earth.