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Research based argument

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Climate Change: Global Problem, Global Solutions

Climate change. This is a term with which most everyone in the world is familiar with, although a great majority do not see the greater consequences it entails. There are some that even believe that this planet-wide crisis is a complete hoax. The facts are all laid out, and to deny them is akin to reaching your arm into a tub of water and saying it is not wet. The truth is simple: planet Earth has a fever, and all of human industry is the cause. Studies by NASA show that levels of carbon dioxide have risen to extreme levels, and have continued to rise, since the industrial revolution. For millennia before the expansion of human civilization and technology, the Earth saw a steady cycle in how its atmosphere was composed. Carbon Dioxide would occasionally spike to just below 300 parts per million, then steadily decline until another spike occurred. This was the natural cycle of the planet, and carbon dioxide levels never rose to any higher than 300 ppm. Cue the rise of human civilization and technology. This era saw a drastic increase in carbon dioxide levels. The levels of carbon dioxide in the atmosphere spiked and then they simply kept rising, and the present day sees carbon dioxide levels at 400 ppm and counting. This, coupled with massive pollution of the oceans and deforestation of the globe, causes massive ecological backlash that can very much endanger all life on the planet. It reduces the precious little amount of drinkable fresh water on the planet, it drives fish and other animals into

extinction, and could very well do the same to humanity. The human race is an endangered species, unless it can learn to curb its wasteful ways.

One of the first things to look at when dealing with climate change is the simple fact of global warming and how it affects the world. The simplest part of this particular aspect of climate change is how increased heat affects the health of people. “One of the direct public health risks posed by climate change is increased heat-related mortality and morbidity” (Gosling et al.). A group of researchers have conducted studies that show an increased rate of mortality related to heat-based causes, such as heat exhaustion and heat stroke, as well as cardiovascular and chronic respiratory illnesses. While it is true that “Governments and community organizations around the world are increasingly allocating resources to prepare for a warmer future climate” (Gosling et al.), this is only treating a single symptom of the larger whole of the problem. These organizations should not be looking for ways to adapt to a problem that will simply continue to grow, but instead should be putting their resources into methods of research that would help reduce the problem in the first place. However, heat-related health problems are not the only threat that climate change poses. Another direct effect of climate change is on the fresh water that sustains life on every continent of Earth. “Freshwaters cover less than one per cent of the earth’s surface, yet are home to approximately six per cent of all known animal species” (Markovic et al.). In addition to being the living environment for many species of animal, fresh water is essential to any life form that does not live in the oceans, including humans. This water is in precious little supply, and that supply is in danger. Climate change poses threats such as pollution and depletion to this precious resource, and could endanger all

non-oceanic life if the fresh waters of Earth are rendered unable to support living organisms. In addition to this, there are the more well-known aspects of climate change. The melting of the polar ice caps and the land-bound ice sheets of the arctic region pose a twofold threat: depletion of the natural habitat of animals and increasing sea levels. “Sea level rise poses potential threats not only to built infrastructure but also to natural resources that provide numerous ecosystem services from which humans benefit” (Yoskowitz et al.). The rising of sea levels poses immediate threat to low-lying and coastal areas, such as Florida, Louisiana, Belgium, and the Netherlands, and would only continue on to threaten higher ground if it were not stopped. The rising sea level will cause mass-flooding and unspeakable damage if this problem is not quelled. Not only would this result in massive decimation of human habitation, but it would cause enormous environmental damage to the species and habitats of these low-lying areas of the world. If climate change is not contained and resolved, then the world as humanity currently knows it will certainly undergo drastic change that can threaten all life on it. Mass floodings would only be the beginning of a domino chain of events, all of which would add up to the destruction of life on Earth.

The key to all these problems lies in human consumption, waste, and expansion. The larger the human population grows, so too grow its needs. Expansion and agriculture to feed and house increasing numbers of people contribute to deforestation, a major factor in climate change. As Franklin D. Roosevelt said, “Forests are the lungs of our land, purifying the air and giving fresh strength to our people.” Trees have the ability to “control climate through things like, precipitation and carbon storage” (Micciolo). The more that trees

become depleted, the worse the problem will become. Reforestation is an essential step in the process of alleviating the illness of the Earth. The planet cannot breath life without its lungs.

Reforestation is only a part of the whole solution. In addition to this, the more obvious reactions must also take place. Motor vehicles must be moved off fossil fuels and phased into cleaner, alternative fuels. Fossil fuels as a whole must be phased out and replaced by cleaner alternatives. Human expansion must be regulated to minimize impact on the ecosystem and maximize the potential for reforestation. Power plants must be revised to run of clean, renewable energy sources. And these measures must be implemented on a global scale, enforced through actions such as the Paris Climate Agreement. Under the Trump administration, America has pulled out of this agreement, and this is a major setback in the efforts to heal the planet. America is a single country that is larger than all of Europe. For the government of a country as large as this to be refusing to contribute to the welfare of the planet is a major detriment to said welfare, and it must be rectified. If one of the most powerful countries in the world can set the example, then the rest of the globe is likely to follow suit, whether that example be better or for worse is up to that country.

With all of evidence piled high in support of climate change, there are still people who publically cry out that climate change is an elaborate ruse and that these changes are completely unnecessary. Most of these climate change deniers are big business tycoons who stand to lose profits if these eco-friendly policies are put into place. These people use "illegitimate scientific, especially economic, claims to trump ethical demands for renewable

energy" (Shrader-Frechette). One of the largest culprits of this is the nuclear energy industry. "Of the twenty-nine major international nuclear-emissions assessments done since 2000—none of which were published in peer-reviewed scientific journals—all eighteen performed/funded by the fission industry trim data by "counting" carbon emissions from only one stage (reactor operation) of fourteen stages" (Shrader-Frechette). This kind of blatant denial from people such as energy tycoons spouted in an effort to save their companies from economic backlash is a large part of the problem. What's worse is that their efforts actually manage to persuade large amounts of the general population, which further perpetuates the problem by convincing people that wasteful living does not harm the fragile ecosystems of Earth. "Climate change is occurring with devastating impacts on human society, yet a major portion of the global population responds to this catastrophe with apathy" (Guo). This is perpetrated by people such as the previously mentioned energy tycoons, as well as the heads of the Trump administration of America's government. The people who believe in these claims are believing in the claims of an extremely underwhelming majority of three per cent of the scientific community. Ninety-seven per cent of scientists are in full agreement that climate change is real, and it is a real threat to the Earth. To deny the fact that climate change is real is akin to denying that flame produces heat.

Climate change. A sickness of the Earth. A sickness that threatens all life on Earth. A sickness that can be cured through globally-enforced efforts. Climate change is a real, tangible problem. It is a problem that affects everyone and everything on this one, fragile planet that houses the only known life in the universe. This problem can be solved if

everyone, everywhere can recognize it, and recognize what they have to do to help alleviate it. The world is in pain, and it is the duty of its inhabitants to help it.

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