

Climate change argumentative essay sample

[Environment](#), [Climate Change](#)



For the past few decades, people - from the citizens to the scientific community - would often comment that the world continues to change. Weather patterns become erratic, daily temperatures often alternate from hot to cold, and the scarcity of resources becomes more prominent in various areas in the globe. However, scientists are divided as to why the world changes as some believe it's a natural occurrence while others believe it is due to climate change. The public had been divided on who or what to blame regarding the current situation of the planet, however, many are currently leaning towards the climate change aspect. Additional arguments were also raised regarding climate change's consequences and what people could do to respond to the issue. Climate change is brought by natural and mostly anthropogenic factors that influences sustainability on all life forms, and despite the consequences of climate change, the public and governments can reduce the severe consequences climate change can bring by utilizing environmentally-friendly solutions, programs and policies that would optimize sustainability from the home to the entire country.

Experts have two separate interpretations when it comes to climate change: due to natural occurrences or due to anthropogenic means. With regards to natural occurrences, Letcher (2009) and Hansimeier (2007) identified space weather, solar activity, and volcanic activity to have made significant impacts to the earth's climate. The first factor, space weather, constitutes to the changing environment happening outside the Earth's atmosphere and influences how the Earth would react to other celestial bodies. Space weather also influences the rotation of the planets, which causes some disturbances in the earth as seen in its weather patterns and temperature.

The second natural influence to climate change is solar activity as seen in the study of Friis-Christiansen and Lassen. In their study, they observed that the average surface temperature in the Northern Hemisphere and in the earth's magnetosphere had been affected by the solar winds emitted by the sun, producing joule heating that warms up the atmosphere. Volcanic activity is also seen as a potential reason on why the climate change persist as volcanic ash and sulfuric gases are capable of disrupting the earth's capacity to allow radiation and excess heat to return back to the atmosphere. As a result, the heat is trapped in the atmosphere and redirected back to the earth, heating it up .

On the other hand, most scientists and the public, lean towards the fact that climate change caused by anthropogenic means or man-made activities which has been proven by scientists to have hasten climate change and severed its impacts. Pittock (2009) and Johansen (2002) cited that as early as the 1800s, anthropogenic activities had already influenced climate change. In the works of Arvid Hogborn and Svante Arrhenius in 1890, they cited that man had contributed to the high increase in carbon dioxide rates the world accumulates each year, which then influences the planet's overall temperature. CO2 emissions causes the Earth to be incapable of redirecting heat out to the atmosphere as CO2 acts as a thick barrier that prevents heat to pass out of it. Arrhenius and Hogborn had discovered that as CO2 continues to increase, temperatures increase up to 3-4 degrees Celsius each year as seen in the Arctic by the time of their study. The high concentration of CO2 due to man-made sources that fosters climate change had been supported by the study done by Roger Revelle and Charles Keeling in 1958.

In their study while in the Mauna Loa and Antarctica indicated that while the oceans have the capacity to retain the concentration, most of the CO₂ remains in the atmosphere and fosters climate change. They had also included that the increasing carbon emissions coming from man is the reason why climate change continues to persist. The World Meteorological Organization and the scientific community had supported this study as countries continue to increase in CO₂ emissions, increasing the overall temperature of the planet over 5.4 degrees per year. The resulting research had immediately called the attention of the public and the various government around the globe to act against climate change .

With the identification of the two possible causes of climate change, experts agree that if left unattended, climate change has the capacity to threaten both biodiversity and human kind. Karl, Melillo, Peterson and Hassol (2009) cited that health, is first and foremost, affected by climate change as it directly influences the environment. Erratic temperatures would cause scarcity of food and water as extreme heat and cold would dehydrate the lands of water that would sustain abundance to plants, while water systems would dry up or disappear completely that may cause animals and humans to have food and water shortages. As a result of this, higher mortality and fatality rates would rise up considerably due to malnutrition, dehydration and climate contracted illnesses fostered by extreme heat or cold. In the US alone, at least 12% of its population had been reported to be at risk due to illnesses they contracted due to the changing climate and the same goes for plants and animals .

Regression, as cited by Dawson and Spannagle (2009) is also seen as a

consequence of climate change as the unstable climate would implicate destroyed habitats and migration/hibernation seasons for animals and plants that may result to extinction. Many species of plants and animals had already been considered extinct because of the erratic temperatures and the subsequent natural calamities caused by climate change. These species would also be forced out of their homes as their habitats no longer have the adequate amount of nutrients and food source and most have been converted by man for their continuous development . Violent natural calamities are also seen as a consequence of climate change as reported by the United Nations. In their 2009 report, Kofi Annan had cited that 300, 000 lives have been taken due to the continuous climate change each year. 300 million people are displaced and affected by severe heat waves, typhoons, floods and earthquakes. If there is no visible solution or action coming from the public and from the governments, it is likely that 20 million people would be deprived from food and shelter, 75 million would be displaced out of their homes, and 310 million would be left vulnerable to climate-induced illnesses .

Although the consequences of climate change seem dire and hard to counter, the public and their respective governments can utilize environmentally-friendly solutions, programs and policies that would optimize sustainability and counter climate change. In the case of individual action, the United States Environmental Protection Agency (2013) and Johansen (2008) identified several easy solutions to follow to aid in the reduction of CO₂ emissions which fosters climate change. At home, families can take advantage of items that has the Environmental Protection Agency

logo that certifies that they would help in reducing energy consumption at home: light bulbs, appliances, heating and cooling systems. Recycling, reusing and reducing items is also an efficient means for the public to practice to reduce climate change as this would allow homes to reduce the amount of waste they dump into landfills that would contribute to further emissions. Utilizing alternative energy sources like solar and wind power for the home and office, even in transportation (using hybrid cars or renewable fuels) is also noted to be excellent means to reduce emissions. It is also cited that growing plants in the backyard, especially trees, fruits and vegetables would also be beneficial as it would reduce the hassle of commuting or travelling to the market and help other plant life convert CO₂ to oxygen. For those who own cars, citizens should also support mass or public transportation to save money and energy given that cars contribute their own emissions to the atmosphere. The amount of emissions saved by utilizing mass transport can average up to two tons per year. Citizens may also aid in supporting social groups and legislators fighting for cleaner energy source and climate change legislation .

Governments themselves can also play a key role in responding to climate change. Hart (2013) stated that the government are the best actors to promote programs and policies that would aid in its reduction. In the United States, for example, it uses at least 80% of energy resources of the country, distributed to schools, local/state facilities and other important infrastructure. In this end, the government can utilize procurement programs to promote the use of alternative energy sources in their facilities to reduce the use of current energy generating facilities known to create high

emissions. Government procurement is also seen as a key to for the development of these renewable energy sources as they test the capacity of these technologies to provide power before converting them to private use. The government could also offer loan programs and guarantees to companies and private individuals concentrating on clean energy development, providing them with startup money and resources to develop their system . In addition, the National Research Council of the National Academies (2010) also recommended that governments can utilize the growing motivation, study and solutions available to reduce climate change and apply it in developing its own climate change policy. Not only would this enable the government to identify clear strategies that could adhere to all sectors, it would also enable commit to reduction and implementation agreements to sustain the climate change policy. The government must also take the leadership helm to boost response mechanisms and discussions to support the climate change initiative and reach out to the international community to aid in its efforts. Without the leadership of the government, it is likely that climate change initiatives would not easily take root .

Whether or not climate change is brought by natural or man-made means, climate change is a crucial issue that must be taken into consideration by all as the consequences it can bring can be severe. The possibilities of endangered habitats, food and water source and high mortality and displacement continues to grow as the world further develops to sustain the population. Without any action, it is likely that climate change would continue to threaten each being and disable any recovery methods to work to prolong the life of the planet. Action can be done by all, whether they may

be an ordinary citizen or a lawmaker. Utilizing environment friendly alternatives can already save the planet from immense emissions, which would be fueled with active government backing. As long as the people and its governments fail to see the importance of acting against climate change, the younger generation would no longer be able to see the sustainable environment we currently take for granted.

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