
How Global Warming Became Real: A Retrospective Approach

Humanity is currently facing one of its biggest problems ever. Indeed, the Earth is warming and consequences might be devastating for the future generations to come. According to the Common Attitudes Toward Anthropogenic Global Warming, “We all need to adopt a more primitive lifestyle and give up a large part of industry and intensive farming, essentially moving back to pre-industrial times. The back to nature approach will allow the Earth to heal in the short-term and allow humans to live in harmony with nature in the long-term.” (SITE)

There is a general agreement among scientists that Earth’s climate is being affected by the industrial society; by specifically, the release of greenhouse gases, majority being Carbon Dioxide while others include Methane, Nitrous Oxide, and Fluorinated Gases. According to the Union of Concerned Scientists, “Carbon dioxide has contributed more than any driver to climate change between 1750 and 2011”. The Intergovernmental Panel on Climate Change put together a global climate assessment in 2013, comparing the actual influence of three changes in environment resulting in numbers due to human activity. These three changes were the emission of key heat-trapping gases, as well as aerosols, and the change of land use. They conducted the assessment by measuring the abundance of heat-trapping gases in ice cores, atmosphere, and other climate drivers along with models; and calculated the net increase or decrease in the amount of energy reaching the Earth’s surface. Positive values indicated average surface warming and negative numbers indicated average surface cooling. And, in total, carbon dioxide has the highest positive value of all the human-influenced climate drivers. Some of the other gases mentioned have more potent heat-trapping ability, but are simply far less abundant in the atmosphere.

Carbon dioxide comes through the atmosphere through the burning of fossil fuels such as; coal, natural gas, and oil; solid waste, trees and wood products, and also certain chemical reactions. This can be sequestered from the atmosphere when it’s absorbed by plants as part of the biological carbon cycle. Methane is delivered during the production and transportation of coal, natural gas, and oil. Emissions also come from livestock such as cows, horses, and other farm animals and the decay of organic waste in municipal solid waste landfills. Nitrous oxide is released into the atmosphere during agricultural and industrial activities, and during combustion of fossil fuels and solid waste. Fluorinated gases such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride are synthetic greenhouse gases that are spread from a various amount of industrial processes. These gases are typically spread in smaller quantities, but because of potency, they are referred to as High Global Warming Potential gases (High

Need help with the assignment?

Our professionals are ready to assist with any writing!

GET HELP

GWP gases). This goes to portray how commonly these gases are spread throughout the atmosphere by realizing how often and constantly these processes are taking place.

As expected, in recent years, temperatures have been among the hottest. The warmest five year period occurred from 1991 to 1995, 1995 being the hottest year on the record. Climate change is expected to have wide ranging effects including, rising sea levels, increased prevalence of tropical diseases, habitat loss, and extreme weather. Higher temperatures are expected to accelerate the melting of polar ice caps, leading to higher sea levels, which could inundate low-lying coastal areas and islands. Scientists predict that as tropical weather expands farther north and south, tropical diseases such as malaria, dengue fever, and yellow fever will expand also. In Rwanda, malaria rates rose 337 percent with a 2-degree increase in temperatures. As climate changes, most species will not be able to survive in their current geographic locations. As a result, they will need to move to more suitable areas. However, whereas plants and animals had 10,000 years to adapt to a warming climate after the last ice age, they will have only 100 years if humans increase the temperature a similar amount around 5 degrees in the next century. Scientists believe that global warming will not only bring higher temperatures, but also extreme weather variation. This is what we have experienced a lot within the past few years, with shocking seventy degrees temperatures on Christmas Day in 2016. Also, hurricanes, blizzards, flooding, and tornados have been occurring more frequently.

Author Margaret Kriz (2006) states that, “the vast majority of scientists who study Earth's climate agree that the planet is warming, and they blame the greenhouse gases that accumulate in the atmosphere and prevent heat from escaping”. The release of carbon dioxide and methane gases are the two main contributors to climate change. With the warming of the environment almost inevitable now, methane gases are sure to become an even bigger contributor as the planet warms and the ice melts more and more at the poles. It is going to take a global effort, like none have ever seen before, to slow down and bring global warming to a much more manageable condition. People must commence to doing their part. The question is how do Americans effect the environment and what can we do to fix it? Americans everyday use automobiles as a form of transportation, and although it may seem harmless, the use of these cars are proving to be detrimental in the end. According to the Union of Concerned Scientists, “Collectively, cars and trucks account for nearly one-fifth of all US emissions, emitting around 24 pounds of carbon dioxide and other global-warming gases for every gallon of gas.”. Surprisingly about five pounds come from the processes of extraction, production, and delivery of fuel, while an extreme amount totaling to more than 19 pounds per gallon comes right out of your car’s tailpipe. Hybrid cars are now becoming more popular throughout the United States, starting in 1999 when Honda introduced the very first Hybrid car. In “No Silver Bullet”, the author describes the usefulness of these vehicles as, “more-energy-efficient cars which regulate carbon dioxide emissions”. When there are fewer cars to pollute the environment, there is one less problem right there. According to Kriz’s article, there is more research being

Need help with the assignment?

Our professionals are ready to assist with any writing!

GET HELP

done in order to improve all cars and lead to all transportation technologies to depend on battery power. With less use of fuel, the atmosphere has a chance to survive, which ultimately gives longevity to mankind.

There are many different cultures in the world, and with numerous cultures, there are lots of holidays and celebrations. Although, they are not legal everywhere yet, one of the main entertainment for large events and the major holiday, July 4th, is fireworks. Fireworks come in many different colors and different shapes, but all of them share a common factor contributing to the release of greenhouse gases. Despite the fact that they are pretty, they shouldn't be abused so much and should be used only once a year, respectively July 4th. Other than fireworks, the farming culture all around the world contributes to global warming. In order to help the crops grow better and stop insects from infesting it, farmers use fertilizers and pesticides which produce chemical gases which greatly affect the ozone layer. The gases in fertilizers are mostly nitrous oxide with a heat-trapping potential about 300 times of carbon dioxide over a 100-year time horizon, showing how strong nitrous oxide is itself. Pesticides on the other hand have a highly toxic chemical called sulfuryl fluoride which is 4,780 times more potent than carbon dioxide.

The good news is that the government has the technology and practical solutions at hand to accomplish the slight control of greenhouse gas emissions. As individuals, we can help by taking some action in our daily lives to reduce our personal carbon emissions, in order to fully address the issue we must look to our elected leaders to support and implement a set of solutions. Some ideas include; expand the use and access to renewable energy and change our energy system to a cleaner and less dependent on the use of coal and other fossil fuels; increase the efficiency of the fuel we use in our vehicles and support other ways to reduce oil use; place limits on the amount of carbon that polluters such as industries and factories are allowed to release; and reduce tropical deforestation and global warming emissions associated with it.

According to the Union of Concerned Scientists, power plants have been getting away with dumping unlimited amounts of carbon pollution into the atmosphere. There were no rules in action that limited their release of carbon dioxide. Now, for the first time, the EPA has drafted and finalized new standards that will significantly reduce the amount of carbon emissions from power plants, known as the Clean Power Plan. This program determines nation discharge simplification targets by estimating the extent to which states can take advantage of each of them. Options to choose from for cutting emission include investing in renewable energy, energy efficiency, natural gas and nuclear power, and shifting away from ember-fired power. The final regulation also takes stride to limit a hurry to natural gas. Targets differ across states because of each state's unique mixing of electricity-generation resources. Also, because of technological feasibility, monetary value, and emission reduction potentials, all of which vary

Need help with the assignment?

Our professionals are ready to assist with any writing!

GET HELP

across the country. The state is free to combine any of the options in a flexible manner to meet such targets. States can also join together in multi-state or regional compacts to discover the lowest cost options for reduction in carbon emissions, including through the emissions trading program. Although, the EPA did an in-depth analysis finding that “the combined climate and health benefits of the Clean Power Plan will far outweigh the costs and that it will deliver billions of dollars in net benefits each year, including \$26 billion to \$45 billion in 2030”. Although technology is considered to be contributing to global warming, inversely it can also be the exact thing that helps turn things around.

Considering all the research and studies that have been conducted, the uncertainty about the effects of increased greenhouse gases on climate change have no influence on where I stand when it comes to global warming. Things must change. America cannot remain a world power in the 21st century while relying on 19th century fossil fuel technology to generate energy. We as Americans must demand cleaner, safer forms of energy, and use such energy more wisely. If we are going to curb global warming as a whole to protect the future world for our children, we must make a transition.

gradesfixer.com

Need help with the assignment?

Our professionals are ready to assist with any writing!

[GET HELP](#)