

## Essay on Global Warming

Global Warming, aside from pollution is one of scientists biggest concerns. Global Warming is caused by the Greenhouse effect. There are 4

steps in the Greenhouse effect. 1-Sunlight radiates from the sun, through space, to Earth's atmosphere. 2- The sunlight enters the atmosphere and hits Earth. Some of it turns into heat energy in the form of infrared light. The heat gets absorbed by surrounding air and land, which in turn makes it warm. 3- Infrared rays, that are remitted into the atmosphere are trapped by greenhouse gases. 4- The gas then absorbs the light and is remitted back to the Earth's surface and warms it even more. Some of the naturally occurring greenhouse gases are Methane and carbon dioxide. This is the way the Earth keeps itself warm enough for humans to live on it.

The only problem with this is that humans enhance the process even more.

Over the past 200 years the emissions of greenhouse gases have been increasing due to the increase in technology that humans have developed (example, factories). These human-induced gases include carbon dioxide, methane, nitrous oxide, and ozone depleting substances such as CFCs, also known as Chlorofluorocarbons, hydrofluorocarbons, and perfluorocarbons. These gases are generated a number of human activities

such as fossil fuel combustion, waste disposal in landfills, the use of a refrigerator, numerous agricultural and industrial activities, and the cutting down of numerous forests.

These human practices have already changed the chemical make up of the atmosphere. Between the pre-industrial times and today, we have seen the concentration of carbon dioxide rise 30% in some regions, in particular the northern hemisphere, human practices have increased concentrations of aerosols in atmosphere, which is a traditional form of air pollution), which tends to cool the atmosphere.

With all these gases in the air, it is starting to change the Earth's climate. The temperature of the Earth's surface is as warm, if not warmer than it has been in any other century since at least 1400 AD. The

temperature over the past century has risen one degree Fahrenheit over the last century. These last few decades have been the warmest this century. The sea level has risen 4 to 10 inches, and mountain glaciers world-wide have begun to retreat.

It is important to recognize that with the recent warming and the other climatic changes that have been going on have not been related to one another. For example, warming has been greatest over the mid-latitude continents in the winter and spring, with some area of cooling, such as over the North Atlantic Ocean. Local and regional climate variation are not inconsistent with the existence of global warming.

One recent study by the IPCC (Intergovernmental Panel on Climate Change) said that unless governments do something to restrict the emissions of greenhouse gases to a lower level, global temperatures could rise 1.6 to 6.3 degrees Fahrenheit by the year 2100. This would represent the fastest rate of global warming since the end of the last ice age more than 10,000 years ago. With the increased warming of the Earth it could lead to catastrophic events that could endanger living things on our planet.

One event is major drought all around the world. With the warming of the planet, the water on the ground would quickly evaporate causing the rivers and lakes to quickly dry up. This would lead to crops dying from lack of rain, which would lead to food prices to skyrocket, which would lead to people dying from hunger if they do not have enough money to pay the price for food. Another event that would occur from global warming is the drastic rise in sea level. As the Earth warms up, the polar ice caps will start to melt. This would put immense amounts of water into Earth's oceans. All cities along the coast would be flooded from the rise in sea level. This would cause people to move inland, and with more people inland, it would cause a shortage of space in some areas. With the coastal cities under water, this would cause a great economic strain on the rest of the cities throughout the world. Global Warming would also cause extreme weather. Thunderstorms would be more powerful than they have ever been. Tornadoes would be stronger than they normally would. With the warming of the surface it would also warm the ocean over time. This would cause hurricanes to be numerous and stronger than they have ever been.

There is only one way to stop global warming before it becomes a real threat. That way is to stop emitting the greenhouse gases that cause global warming. Only then will the problem of global warming be solved.