Example of essay on the greenhouse effect

Environment, Earth



The world of the 21st century has changed significantly from the way it looked back In the 19-20th centuries. Technological progress has brought a lot of useful things that made our lives much more easier. To start with electricity: It became available to the public in 1930s but the industrial part of the society started to use it even earlier. From that moment we became dependent on it. All electronic devices are connected with it directly. Unfortunately, with all the gain we gat from new technologies there is negative influence on us, environment as well.

The main problem that mankind has faced recently is the Green House effect. What is it and where did it come from?

Greenhouse effect is the process when atmosphere keeps some energy of the Sun to warm up the Earth in order to keep the life on it, however, the human activity has resulted in "greenhouse gases" which have increased the effect artificially.

There are two main types of the "greenhouse effect" term. "Natural" greenhouse effect – this phenomena keeps the climate of our planet warm enough for being habitable. Another one is created by the human activity, which creates the enhancement of Earth's "natural" greenhouse effect by adding more and more greenhouse gases from the industrialization: burning of fuel (usually petroleum, gas, coal, peat and many other). How does this greenhouse effect work? In order to understand this we need to get acquainted with the term of "infrared radiation". Greenhouse gases lower the rate of loosing of the infrared radiation to the cosmos. This makes the Earth's temperature stable. We can imagine the greenhouse gases as sort of a "coverlid" for infrared radiation – it keeps the Earth's surface and lower

layers of the atmosphere warmer than the higher layers. What gases made up the "greenhouse" ones? Something like 80-90% of the Earth's natural greenhouse effect is created by the clouds and water vapors within them. The rest is comprised by the carbon dioxide(CO2), nitrous oxide, ozone, methane, and a few other gases. Some gases like nitrogen, oxygen also absorb and do emit infrared radiation, but their effect on temperature is very weak and usually is neglected. While at the same time methane is a much more dangerous in terms of radiation, rather than Carbon dioxide, but the amount of it in the atmosphere is much less. We are much more concerned about the carbon dioxide, because of the burning of fossil fuels (as well as from burning of the rainforest). The concentration of this gas has tremendously increased since the pre-industrial times. From 270 parts per million to almost 400 ppm in 2013. This fact is considered by the scientist as the main reason of the global warming of the last 50 years. At the same time the increasing of methane is observed, but the reasons for that are still unknown.

The current level of CO2 gas in the atmosphere is 399, 89 ppm (parts per million), whilst the safe level was bypassed in 1988 of 350 ppm! What are the main consequences of the greenhouse effect? First of all the increase of temperature is the main concern. Because of it many other impacts happen. The ice started to melt at the Earth's poles including glaciers, ice in Antarctica, Greenland which directly affected the fauna of these regions. For example, according to the Researcher Bill Fraser the population of Adelie penguins that reside in Antarctica had fallen from 32000 pairs to 11000 in 30 years! Because of the ice melting the sea level has risen significantly(between 7 and 23 inches is expected at the end of the century)

Additionally, the precipitation rate has increased globally. Hurricanes are most likely to be much stronger than they used to be. Different animals and plants that depend on each other might be endangered by the changes that come with industrialization. For example plants might bloom earlier and the insects that pollinate them are unactive. As a result – crops are lower and mankind is influenced by this as well. Another fact is that with the rise of temperatures globally the floods and droughts are getting more and more common. The amount of fresh water is likely to become much less with time. For example if the Quellcyya glacier will melt with the same rate, it will be melted down completely by the end of the 2100, leaving thousands of people that rely on it waterless and without electricity. With the current situation diseases are much easier to spread, for example malaria.

Overall, the situation is getting worse. Climate changes are inevitable unless we start doing something to reduce the rate of greenhouse gases emission.

What steps should be taken?

Well, it doesn't only depend on the top officials. We cannot blame the governments for being neutral to this situation. We need to fight this problem as well!

Simple examples are to use the resources wisely! For example water. Keep in mind that somewhere overseas people do not have such opportunity as to wash the dishes in the warm water. In fact, they have limited access to the water! Do not forget to turn off lights once they are not necessary. Do not forget to recycle things that are no longer needed.

As for the governments part – they should pass new laws on controlling the carbon dioxide emission rates. New technologies should be implemented soon enough to reverse the situation. Hybrid, electric cars are the way to go!

Finally, we can and must do something about the greenhouse effect and climate changes. Some people might think that it will not affect them, but they should be aware that their descendants will not have enough time to reverse the effect as we do now.

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