

Warming climate essays example

[Environment](#), [Pollution](#)



Global warming has evolved into a demure problem in the present-day world. The problem is very serious, as it concerns a possible lift of temperature and climate alter. Climate warming is a slow and gradual upsurge in the medium temperature on our planet that there is currently. Climate warming is a fact, with which to argue is pointless, and it is therefore necessary to take a sober and objective approach to its understanding. The Earth is warming and this has a tragic effect on the glaciers of our planet. The temperature surges, the ice begins to melt, and the sea level begins to rise. This term “ global warming” was introduced by researches. They expand some efforts trying to decide this issue. In a different way, climate warming can lead to very dangerous climate change, in addition to increasing the temperature. For example, across the past hundred years the medium temperature has risen by about 1 degree. It means that for the past two decades, the temperature of the planet’s surface rose at the level of 0.14 ± 0.06 °C. (Fyfe). As the climate system is a complicated one, there always be difficult to predict how the Earth's temperature will shift. However, some presumptions have been already made. The planet will heat between 2 and 6 °C in the next decades. Such alterations may not seem perilous, but, actually, the consequences can be fatal for all humanity. (“ Global Warming : Feature Articles.”).

The opinion of scientific world converged in one – warming climate is a result of the industrial revolution. Scientific and technological progress has led to the expansion of human capabilities and new technologies. People often see on TV and learn from the newspapers that factories and plants pollute the environment, emit their wastes to atmosphere. Industrial pollution can be presented in many ways. The pollutants considered to be not only solid,

liquid and gaseous substances, but also electromagnetic radiation, heat, noise in amounts harmful to man, animals and plants, both directly and indirectly. Global sources of pollution of the natural environment are heavy industries. One of the main pollutants of the biosphere are heavy metals. Among various pollutants, heavy metals (including mercury, lead, cadmium, zinc) and their compounds are distinguished by prevalence, high toxicity, many of them also have the ability to accumulate in living organisms. They are widely used in various industrial productions. The main sources of heavy metals in the environment are companies producing non-ferrous metals and alloys, refining, chemical industry, thermal power stations, coal-fired. Heavy metals pollution is one of the most dangerous in America, annually 225 pounds of arsenic, 114 pounds of lead, 4 pounds of cadmium, and many other toxic heavy metals released into the atmosphere. (" Facts on the Pollution caused by the US Coal Industry")

In our days, the most extensive and significant to the environment is considered industrial chemical air contamination. Chemical pollution of the atmosphere is also one of the most dangerous to human life. Coal-fired power plants emit about 22 billion tons of carbon dioxide and other greenhouse gases a year. Sulphur dioxide is throw by the urban CHP plants running on coal or oil, in which there are a lot of sulphur, nitrogen oxides, carbon oxide (carbon monoxide), chlorine, formaldehyde, phenol, hydrogen sulfide, ammonia, etc. (" Does Air Pollution-specifically Particulate Matter"). For example, in the USA every year 220 tons of hydrocarbons are released in the air. Fossil fuels are made of hydrocarbons; when they do not burn completely, they are released into the air. They are a cause of smog in the

bid cities with a number of plants. For instance, the city of Steelworkers Pittsburgh is experiencing a boom in natural gas production. Added to this is its location downwind from coal-fired power plants in Ohio and West Virginia. Part of anthropogenic emissions of heavy metals released into the atmosphere in the form of fine aerosols, can be transported over long distances and cause global pollution. A certain danger for the environment is atmospheric emissions of thermal power plants, especially running on high-ash coals. Mostly falls at a distance of 25-40 km from the pollution source. Industrial air pollution is a result of the air foulness with gases, dust and smoke in large amounts. All the above listed things in the abundance heat the air, and, consequently, warm the Earth's climate. All these particles, which pollute atmosphere, can vary by their condition: steady and liquid. After these particles of duct or smoke appeared at the atmosphere, they can stay there from couple of days up to several weeks, before fall back to the surface with rain. The duration of the residence of the particles depends on their situation at the atmosphere. The higher they are in the atmosphere, the longer they will be there – up to several years. Air pollution is a sequence of the development of heavy industries. In the world annually, 37 million people died from polluted air by the heavy industry.

The situation in the USA is complicated, as this country has always been on the main world's emissions in the history of warming climate. This conclusion was made due to intensive industrial development. Suffice it to say that in our day in the U. S. there are 2400 thermal power plants, 250 oil-refining plants, 144 steel-smelting plants, 100 pulp and paper mills. Moreover, production of metals and construction materials are accompanied by the

emission of carbon dioxide and other greenhouse gases. Since 1950, the general surface temperature in the USA has shifted up to 1 °F. This seemingly small change in temperature has led to the melting of glaciers in the early spring, the blossoming trees, changing habits of some species of animals. Such inconspicuous alterations are a deviation from the norm. According to the Inventory of U. S. Greenhouse Gases and Sinks, 21 % of all USA emissions come from the heavy industries. (“ Sources”) First of all, these gas pollutions is a result of the burning of the mineral fuels for energy generation. Due to the rapid development of industry, which began to use coal as the primary fuel, coal mines appeared throughout the country. A large number of pollutants thrown into the atmosphere by various industries, such as metallurgical enterprises of the US annually emit more than 150 thousand tons of copper, 120 thousand tons of zinc, 90 thousand tons of nickel, cobalt, mercury, etc. In the late 60's – early 70's of XX century in the USA weight of waste was 5 to 6 billion tons per year. At least 20% of this material is chemically active, i. e. has the ability to react with chemical elements of the natural environment. These are, for example, oxides of sulfur, nitrogen, carbon released into the atmosphere when metallurgical, pulp and paper industries. In cities where there is the coal industry, the air is saturated by fly ash, which volatile organic compounds and lead, leading to increased incidence of respiratory organs, diseases of the brain. Metal production is the “ champion” for the poisoning of the air. Amenable to the report of The United States Environmental Protection Agency, there are six main air pollutants. One of them is Carbon oxide. Is obtained by incomplete combustion of carbon substances. In the air, it enters the combustion of solid

waste with the exhaust gases and industrial emissions. Annually this gas enters the atmosphere of not less than 1250 million tons of carbon Oxide is a compound that is actively reacting with components of the atmosphere and increases the temperature on the planet and the greenhouse effect.

One may also mark the aerosol industrial pollution of the atmosphere. In 2005, annual emissions of carbon dioxide exceeded 6. 1 billion tons (CO₂ equivalent), or 21 tons per capita. It was nearly 1/4 of the world total of such emissions. The main sources of artificial aerosol air pollution are thermal power plants, which consume coal with high ash content, beneficiation plants, iron and steel, cement, magnesite and carbon black plants. Aerosol particles from these sources are very diverse in chemical composition. These particles pollute the whole territory of the United States, as the industrial establishments disposed all around the country near the places of location of various natural recourses. (“ Sources”) Yet, it is not surprising that the most contaminated sites are located around the big cities. California is one of the most contaminated states in America. Among polluted California cities are Los Angeles and San Diego. For example, Bakersfield is hot and dusty, surrounded by the largest oil field in California. In Bakersfield the worst air in America. The list of the most polluted cities includes Dallas, Houston, Knoxville, Phoenix and others. (“ Air Pollution in America”).

The number and kind of emission is changed every year. Such alterations of the kind of the emissions are caused because of shifts at the US economy and technological innovations and industrial manufacture and many other attributes. Of course, regulations of air pollution and the monitoring of the emission also have an impact on the kind of pollutants. The United States

Environmental Protection Agency addresses the issue of warming climate. The Agency is anxious about various emissions, which can be dangerous for human beings. They have the set of main harmful criteria of pollutants. Among these criteria contaminants are sulfur dioxide (SO₂), carbon monoxide (CO) and (CO₂). Undoubtedly, all actions and deeds about the control of the industrial air pollution must be regulated by the special institutions and set of regulations. For a reason the end of the 20th century in America was called as an “ environmental era”. It was so because, in the 1970, the government of the United States of America adopted the law the Clean Air Act Amendments. This Act set afloat national forces in order to improve the quality of the US air. This amendment has been appended a set of new rules to control the harmful emissions. In conformity with the mentioned above act, The United States Environmental Protection Agency undertake to control the emissions of the toxic elements into the air. As a result, the Agency has created the register of source categories, which must correspond to the specification of requirements for listed pollutants. However, one of the first USA regulations for environmental security was National Environmental Policy Act, passed in the 1969. This rule ought the government to view the influence of their acts or behaviors on the environment. This rule continues to be one of the most authoritative and often used regulations. There are many of such laws and regulations in U. S. law system. However, America is not the one, who alarmed with the warming climate. United Nations is also being concerned that as a result of industry development there was a significant increase in the concentration of greenhouse gases in the atmosphere that such an increase enhances the

natural greenhouse effect and that this will lead on average to an additional warming of the surface and atmosphere and may adversely affect natural ecosystems. The international community's response to the overwhelming evidence, drafted and repeatedly confirmed intergovernmental panel on climate change (IPCC), as well as evidence of the existence of climate change, which is largely the result of industrial anthropogenic activities. As a result, 9 May 1992, countries adopted the Convention, which entered into force on 21 March 1994. After the adoption of the Convention, the governments of parties to the Convention, however, was aware that its provisions are not in themselves sufficient to solve the problem of climate change in all its aspects. In this regard, at the first Conference of the parties held in Berlin in early 1995, there was a new round of negotiations to determine a more firm and detailed commitments. (“Pollution Control at the Local and Global Levels”). The UNFCCC has established the general concept of implementation of activities of the international community aimed at addressing the problem of climate change. The main goal set out in the Convention is to stabilize the level of greenhouse gas concentrations in the atmosphere to a level preventing the harmful influence on the climate system. The undeniable advantage of the Convention is the close partnership of 191 countries that have ratified this Convention by June 2007. (“Pollution Control at the Local and Global Levels”)

In conclusion, it is important to mention, that warming climate issue is one of the serious troubles of the modern society. Among the methods of Earth's protection, there might be possible concern about the expansion of green spaces. Because the plant is a powerful, uninterrupted functioning

purification, expertly created in the course of evolution nature. However, plants, as we have seen, severely injured themselves by toxic substances in the atmosphere. We currently still insufficiently attentive to the facts of loss of productivity of cultivated plants under the influence of pollutants. Meanwhile, this leads to higher material costs and a decline in the efficiency of agricultural production. Each of us can do very much to preserve the purity of air and water. Humanity has changed the natural flow of processes in the biosphere of the planet. Chasing a manufacturing success, we have received global environmental problems. However, Earth's resources are very limited, and exhausted the supplies of the Earth, we can just simply disappear, as has already disappeared many species of plants and animals. If we want to survive, fight against environmental pollution should be today.

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