Green House Effect

[Name of the Writer]

[Name of the Institution]

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**Introduction**

Climate change is the striking global issue facing mankind due to the excessive emissions of green grasses in the atmosphere such as CO2, Nitrous Oxide, methane, and fluorinated gasses. Climate scientists revealed that humans have affected the earth's atmosphere over the past couple of centuries in dramatic ways which consequently caused global warming. Our planet is constantly striking with a huge amount of radiations from the sun, these radiations are in the form of ultraviolet rays, infrared, visible light, and various types of other radiations which are not visible to the human eyes. The greenhouse effect is the process through which the earth surface atmosphere is getting warm by the emission of infrared radiations. The infrared radiation is increasing continuously which resulted in the rise in temperature. While most of the IR is escaping to space which is emitted from the upper atmosphere. The photons of IR are mostly restricted by the green gases and clouds in the atmosphere which resists it to escape directly to space. According to the conference held in Paris by United Nations, 195 countries agreed to reduce the emission of carbon dioxide gas and other greenhouse gases for the purpose to restrict the raising temperature of the earth (Andersonn et al., 2016). The wellbeing of human beings and other creatures are tied to the nature of the ecosystem, the emission of these radiations causes many health issues to human beings (Pecl et al., 2017).

**Statement of the issue or problem**

Changes in greenhouse gases are the key drivers for the changes in climate which resulted in many public health issues around the globe. There are certain consequences of environmental changes such as the extreme heat waves, natural catastrophes, rising the sea levels, intense hurricanes, which directly or indirectly affected the physical, social and psychological health of mankind. For instance, toxic air pollution, toxic sunlights, and extreme weather events are the key drivers for many fatal diseases. The current study will focus on public health issues caused by greenhouse gasses.

**The historical basis of the problem**

The adverse effect of greenhouse gases was first claimed by a Swedish scientist Svante Arrhenius in 1896, he revealed the relationship between carbon dioxide gas concentration with the temperature of the earth. He stated that the infrared radiations are absorbed by the water vapours and carbon dioxide gas which kept the earth temperature up to 15-degree Celcius. He suggested that the increase in CO2 gas concentration would lead the earth temperature to 5 degrees Celcius rise. After the discovery of Arrhenius, this concept was ignored for a long time because at that time it was believed by other scientists that its impact is insignificant. They believed that oceans have sufficient carbon sinks which can cancel all our pollutions. In the 1940s it was proved that an increase in emission of carbon dioxide gas has resulted in higher absorption of infrared radiations. It was examined that water vapours absorb other types of radiation than CO2. In 1955 another scientist Gilbert Plass revealed that the growth in carbon dioxide concentration in the atmosphere would intercept the IR which will lose to space. In the 1960s with the use of modern technology it was observed that in the atmospheric CO2 has produced a concentration curve in Antarctica and Mauna Loa. These curves proved the cause of global warming for the first time. However, the media and some scientists had ignored the risk of global cooling which would be developed by the new ice age. Finally, in the 1980s, it was acknowledged that the earth temperature was far higher than in the past. The greenhouse effect theory was proposed UN Environmental Programme has founded IPCC which tried to find the impact of the greenhouse effect on the climate. The terminology of the greenhouse effect has changed from 1998 and onwards by the influence of media, and people used alternate terms for it such as global warming and climate change. Global warming has resulted in many infectious diseases due to the extreme weather and warming oceans, some of these diseases are new while others are re-emerged. It resulted in extended rainy seasons in many regions so the drought periods also extended. The wetter climate has increased mosquito-borne diseases such as malaria, yellow fever, dengue fever, Rift Valley fever, and elephantiasis. The excessive rains resulted in more floods and standing water which boosted the reproduction of mosquitoes breed (Torres, 2015). The warmer oceans have become an ideal ground for the rapid growth of algae blooms, and the increase in nitrogen and phosphorus in oceans raised the production of cholera bacteria. These toxic organisms are spread in the world due to the changing winds which pushed them toward the coastline. These organisms contaminated the drinking water and caused cholera and other diseases. Moreover, the greenhouse effect has a significant impact on mental health and wellbeing. Research has found that changes in climate have exposed people to trauma which affected mental health. Climate change and natural disasters have raised the rate of anxiety and other emotional stress. The intensive migrations, drought, and heat have affected the social life of the communities which are vulnerable to these disasters. Agricultural land has severely affected, and diseases in children have increased which resulted in depression, and griefs in vulnerable communities.

**Correction of the problem**

There are many steps taken by the environmental departments to save the environment. On an international level there are certain campaigns to fight against global warming and reduce the emission of carbon dioxide. There are many ways to save our planet from such unrecoverable loses. Here I will discuss some of the steps which can reduce the greenhouse gases.

* The use of hybrid cars can reduce the emission of toxic gases which can harm the ozone layer and causes global warming. Hybrid cars use more electricity and less use of gasoline, which reduce the emission of carbon dioxide.
* At the corporate level, there is a trend of sustainability and eco-friendly operations. They use the latest machinery and technologies to save the environment and reduce the emission of toxic gases and other chemicals.
* Use of renewable energy, and generate electricity from solar, wind, wave power, and hot rocks. To reduce the emission of greenhouse gases many countries in the world are replacing their energy system to green sources of energy.
* The use of plastic bags is being replaced in many countries because it produces many toxic fumes when it is burnt. These bags are harmful to both marine life and wildlife. It is replaced in many countries by the cloth bags, however, it still needs to aware of public awareness and government actions to completely ban such bags and packagings.

**Advantages to correction of the problem**

There are many numerous advantages of reducing greenhouse gases and taking the above-mentioned steps.

It can prevent the causes of many fatal diseases and improve public health. Moreover, it could prevent premature deaths (*New Research Quantifies Health Benefits of Reducing Greenhouse Gas Emissions*., 2014). There are many countries where people die with heat strokes in summer. Especially children and elders are more vulnerable to the effects of the highest temperature.

The replacement of the plastic bag will not only save the atmosphere from its toxic gases when it is burnt but also save many animals and sea species. Many animals die by intaking plastic while grazing, which is disposed of by humans in their ways. In some developing countries, there is a poor system of disposing of wastes, some of these wastes are thrown to sea that can cause deaths of marine life.

It has been observed that people are switching to use those brands who strictly follow the standards of saving the environment. Researchers have proved that the sales of products have affected by the use of green HRM and eco-friendly practices by the corporations.

**Disadvantages to correction of the problem**

There are many advantages of these steps to save the environment, and reduce the emission of greenhouse gasses. Greenhouse gases have raised the temperature of the world and cause many environmental and health issues. There are many ways that can help to reduce the emission of greenhouse gases. However, these actions have certain drawbacks which are significant and can not be denied. Here we will discuss the disadvantages of correction of this striking issue.

The use of green products is found highly expensive as compared to ordinary products. It can increase the costs so it would be difficult for the poor nations to afford these products.

The small businesses and low budgeted businesses can not afford the latest technology which reduces heat and carbon dioxide emission to a greater extent. To provide green products and environment-friendly machinery at lower costs, which will be affordable for low-income users and investors.

There is still a large gap to replace conventional products to green and eco-friendly products. These products could be replaced in future but still, it needs efforts and huge investments. There is also an impact of some lobbies, they don't want green products which will replace their products, the conflict of interest is one of the major obstacles in the way to adopt green practices.

**References**

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