

Global Warming: What is It in the Current Realities and How Does It Affect the Planet

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Keywords: Global warming, climate change, biodiversity, overpopulation, ecosystem, health issues, diversity, agroculture.

Abstract: Climate change is one of the pending problem in modern days. With the development of new technologies and services that were aimed to fulfil the needs of the consumers and making the average person's life more comfortable turned out to give an unpredictable and challenging future. The slightest temperature change is already making dramatic changes in different regions. Climate change or global warming as it is branded in the media to give it more rememberable and catchy appealing. The following work try to depict what is climate change and its impact on the planet and other aspects that are important for the people that are living in it. At the beginning of the work, the reasons and the causes of the global warming will be outlined and briefly explained. Industrial impact on global warming will also be described. Why mass production and demand increase, lately, due to the overpopulation, are contributing greatly to Global warming. Also, the impact on economy because of the global warming will be briefly outlined in some amour aspects. How it will be reflected to the average people and what are the possible consequences. There is more severe part of the global warming which is introduction of new diseases to the areas that they newer occurred or amplifying the already existing ones. And lastly, the Impact of global warming on the environment. It is important to understand that the ecosystem that we live is suitable for us, as every part of it is conducting some role in the whole system. Therefore, it is important to avoid the loss or alternation of the system that we live in. at the end, the possible solutions will be outlined to solve the climate change or at least keeping it at the same level.

1 INTRODUCTION

Prosperous life, economic stability and modern devices have given an idea of the increasing trend of comfort without realizing the consequences of such a path. The difference we have compared to our ancestor is a large number of goods, well-equipped houses with various devices and furniture, a variety of vehicles and machines, heating and cooling systems, and many such things. Therefore, the big question arises, what is the problem with this lifestyle. The answer is complex and at the same time simple. If put through one perspective, one can find that everything that was said above is somehow connected with energy. Or, from another point of view, it is a cycle of connected events, which in one way or another leads to an increase in undesirable consequences. In modern days, energy is what thrives our everyday life and cycle of end. Energy comes from the earth in different forms, but the main source

of energy is fossil fuel. There are main sources of energy that comes as listed: coal, oil, and natural gas. These sources of energy are used to generate up to 85 percent of the world's energy. The reason for the usage of fossil fuels in the first place that they are relatively inexpensive, transportable, safe, and abundant (MacCracken). These fossil fuels also greatly effect our climate negatively. There are some minor influencers as well. Climate change or, as recently used, Global warming is a result of mostly from burning fossil fuels.

Global warming is a phenomenon that can be heard and seen lately in almost everywhere, but not has been dealt properly yet. It is one of the most pending problems to be solved in the near future. It is believed that the rise of the temperature is mainly happening because of the human activities, rather natural. The main contributors are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) (figure 1) (EPA, www.epa.gov). The first mentioned is

accounted to be the main contributor to the changes in the planet.

If to be compared to past before industrialization, one can see that these greenhouse gasses dramatically increased their concentration in the atmosphere. Since increasing the average temperature of the planet. It is true that the slightest increase in temperature will positively effect the yield in some regions. However, it also fraught with unwanted consequences.

As the Global warming is a complex problem, the work will at some major components. Which industries are more committed to changing the average temperature of the planet. What are the consequences of the Global warming to planet and humans. The economical point of view is also covered. And at the end the possible solutions that can be applied to solve the problem.

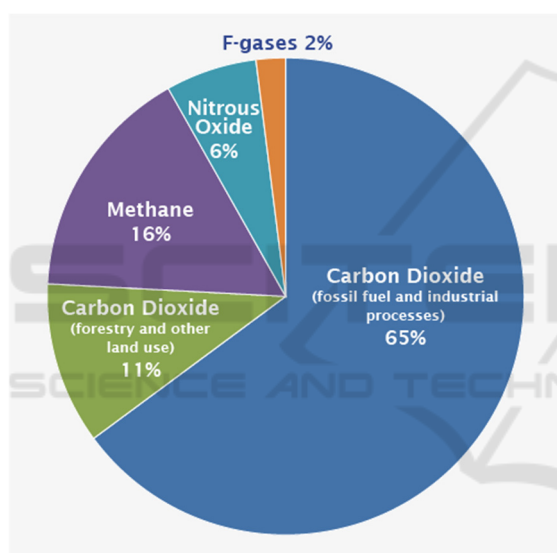


Figure 1: Global Greenhouse gas emission by gas.

2 GLOBAL WARMING AND ITS IMPACT ON THE PLANET AND TO HUMANS

2.1 Global Greenhouse Gas Emissions by Economic Sectors

With the increase of population, there is a need for the increase of production. Corporations and industries will try to profit at any cost. Which means increase of production rate that leads to contributing greatly to the Global warming.

Goods production is related with use of a lot of chemicals that are then left in form of waste in the designated areas or released to the ocean or sea. In both cases, the outcome is damaging the climate. The chemicals will eventually escape to the atmosphere or make unusable the land and the water it was released.

Agriculture sector also plays a big role in the emission of greenhouse gasses. It is estimated that agriculture is responsible for almost 28 % from total emission. Meaning that a further increase in production will increase this number. The common areas in agriculture that are responsible the most for the climate change are as follows: burning of residues, agricultural soils, enteric fermentation, rice cultivation and manure management. With the changing climate, it is hard to keep up with the demands. More production means more land and water usage, natural resources, energy and so on. Lands for agriculture use are less effective on capturing the greenhouse gasses and after a while due to the use of fertilizers and another chemical they turn barrel (Magomedov, 2020; De Cara, 2005).

The other sector is transportation. Greenhouse gas emissions from this sector are mainly associated with the combustion of fossil fuels for road, rail, air and maritime transport. Nearly all (95%) of the world's transportation energy comes from petroleum-based fuels, mainly gasoline and diesel.

Lastly, the largest contributor to the climate change is electricity and heat production, which involves the burning of coal, natural gas, and oil.

Of course, there are other influencers to the climate change, but will not be covered in this work.

2.2 The Impact of Global Warming on the World Economy

If earlier we considered economic sectors and their contribution to climate change, now this paragraph will be devoted to looking at the problem from a different angle. If global warming continues to grow at the same pace, it could seriously affect the economy as a whole. The first sector to be hit by the effects of global warming is the agricultural industry. Rising temperatures disrupt the agricultural ecosystem, altering agricultural climate elements such as temperature, rainfall and sunlight, while further impacting agriculture: reduced yields, impaired ability of plants to receive and use moisture, changing flowering and harvesting seasons, increase in diseases and pests. One can note that the increase of production in agricultural sector will directly negatively effect the climate change and vice versa, as it was mentioned previously.

Today, big corporation uses climate change to profit no matter what. Ordinary people will feel the rise of the cost of almost any product. Also, harsh and unpredictable weather will make it hard for subsistence agriculture, hence leaving them in hands of the same corporations. In a changing world, subsistence agriculture must keep pace with new technologies in order to withstand difficulties and face future challenges. Obviously, there are many practices that can be applied directly to subsistence agriculture for improvement, but due to the different locations of subsistence agriculture, it is difficult to get the same results (Magomedov, 2021; Gibbs, 1993).

Infrastructure is also at greater risk. As it was mentioned before, rising water due to the climate change is directly related to the infrastructure is being at risk of flooding. Some experts say rising sea levels could potentially result in trillions of dollars in asset value loss. These are losses from damage to housing, damage to airports, docks, bridges, railways, power lines. Much of this infrastructure is likely to require extensive repair or replacement.

2.3 Health Problems Brought by Global Warming

Global warming can worsen the living conditions by different ways. For example, weather plays a major role in the standards of living. If the weather is unpredictable, one will be at greater risk of living in life-threatening conditions. Therefore, mass migration and security threats will occur. Global warming is likely to lead to an increase in the number of "climate refugees" - people forced to leave their homes due to drought, floods or other climate-related natural disasters. Mass displacement of people and social upheaval can lead to civil unrest and even trigger military intervention and other unintended consequences

It is estimated that poorer countries will face the harsh consequences of global warming. Global warming is fraught with many consequences and hence requires throughout analysis and ways of solutions.

Diseases are the other side of global warming. People suffering from heart problems are more vulnerable to elevated temperatures, especially those who live in already warm areas, as their cardiovascular system has to work harder to keep their bodies cool. Lung diseases are also related to the Global Warming as the high concentration of ozone can damage lung tissues. The global warming introduced a lot of diseases and in the future with the higher temperature there is the chance that these diseases will multiply.

2.4 Impact of Global Warming on the Environment

Environment will be influenced the most as Global warming continues to be the issue. Unpredictable weather conditions will damage the well-established ecosystems by transforming them or completely destroying. Because of drought in some area's vegetation will be destroyed and forcing the animal species to be moved to other less known regions (which also put them in danger). Flooding or water shortage will be the other caused for the ecosystem to be shocked. Why it is important to sustain the environment at its finest. The first reason is biodiversity. Our planet is full of diversity, and every part of it plays an important role in the whole system. Therefore, when one part goes down, the others are at risk of collapsing. So, keeping the existing ecosystems and environmental state is crucial.

For the humans at first will it be noticed in yield loss. The more damaged is environment, the less it will give back. The land could be completely barren. Not animals will be forced to move to other regions, but humans too.

It is also true that global warming could enrich some region, bringing a new life to them. Other thing is that the alternation or mixing of the environment will create new ecosystems and hence acting in a positive way. But in global scope, Global Warming is more harming the environment than fixing it.

3 POSSIBLE SOLUTIONS IN THE MODERN DAYS

Global warming is a challenging issue that needs to be treated accordingly. The problem is getting worse by every day and in time solution is required. The following paragraph will cover some main methods or techniques used to ease or completely neutralise the problem.

3.1 Carbon Polygons as Future Solution to Solve the Problem

As reported on the official website of the Ministry of Science and Higher Education of the Russian Federation, "carbon polygons are territories with a unique ecosystem created to implement measures to control climate-active gases with the participation of universities and scientific organizations."

In a simple way, these are areas specifically designated for studying the ability of various plants to

absorb carbon. The goal of the project is to study the carbon balance in the ecosystems of the Russian Federation and, on this basis, develop technologies for monitoring carbon runoff and emission, as well as methods for calculating the carbon balance for various types of ecosystems. At the same time, theoretical knowledge obtained as a result of research should be tested in real and critical conditions and applied in practice.

Polygons must operate for at least 15 years, but the creators expect that their activities will never stop. It is expected that several dozen carbon landfills will be created in the near future, and their network will cover the entire territory of Russia (Carbon Polygons, carbon-polygons.ru).

3.2 Agroecology as a Method to Reduce the Impact of Agriculture on Global Warming

Agroecology is increasingly recognized as the way forward for agriculture, able to achieve productivity goals without depleting the environment or limiting the opportunities of communities. Agroecology, which uses ecological concepts and principles to design and manage sustainable agricultural systems, is constantly proving to be able to sustainably increase the overall production of diversified farms and has much greater potential to combat hunger, especially in economically and climatically volatile times (Mentsiev, 2019).

Agroecology, in simple words, is a mechanism that brings all systems together in harmony and leads to a path that is less harmful to nature and meets productivity within its capabilities. However, these mechanisms also need to integrate new technologies to meet the needs.

3.3 Clean Energy or Renewable Energy

If we cannot reduce emission of unwanted gasses to the atmosphere, renewable energy might be the great replacement. Renewable energy is any form of energy from solar, geophysical or biological sources that is replenished by natural processes at a rate equal to or greater than the rate at which it is used. Unlike fossil fuels, most forms of renewable energy produce little or no CO₂ emissions.

3.4 Consumption Cut

Lately, due to the economic flourishing everyone is able to purchase or buy stuff in a vast amount that were not possible before. Most of the people don't

even use half of the product that they purchased after a few days, which means that marketing is at its finest in the last decades. More consumption means more production and hence higher effect to the climate change. Hens trying to purchase only stuff that is important or cutting out the hobby of buying a lot of stuff.

There are many other things that can be described as factors influencing climate change. But this work will only cover the previously mentioned points.

4 CONCLUSIONS

To conclude, the work was done to outline the importance of understanding the climate change and its negative influence. At the beginning, the climate change is explained and what can it transform to. Then the common committers to release greenhouse gasses to the atmosphere were presented. Similarly, the solutions to overcome the issue.

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