

# **Greenhouse Gases and Their Impact on Global Warming**

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#### <u>Abstract</u>

The Greenhouse effect is a key factor in keeping the earth warm because it retains some of the properties planetary heat that would emanate from space toatmosphere.

Research report on greenhouse gases and their impact on Global warming. Without the greenhouse effect The average global temperature can also be very cold and life on Earth as we know it can be it is impossible.

Greenhouse gases include water vapor, CO2, methane, nitrous oxide (N2O) andother gases.

Many researchers, engineers and environmentalists have expressed deep concern about global climate change. Fossil fuels are continuously used for power generation. Burning these fuels produces gases such as carbon dioxide, methane, and nitrogen oxides, leading to global warming. Deforestation also leads to warmer temperatures. The threat of global warming continues to cause enormous damage to the global environment. Most people are not yet aware of global warming and will not see it as a major problem for years to come. Whatmost people don't understand is that global warming is happening and we are

already experiencing some of its catastrophic consequences. It has a serious impact on the ecosystem and upsets the balance of the ecosystem. Due to the insidious effects of global warming, we need to find some solutions. This paper introduces global warming, explains its causes and dangers, and presents several solutions to solve this hot problem.

Climate scientists believe that rising atmospheric concentrations of carbon dioxide and other "greenhouse gases" released by human activities such as burning fossil fuels and deforestation are warming the planet. A mechanismcommonly known as the "greenhouse effect" makes the earth habitable.

These gases in the atmosphere act like greenhouse glass, taking in sunlight and preventing heat from escaping. However, human activity has altered the chemical composition of the atmosphere through the accumulation of greenhouse gases, primarily carbon dioxide, methane, and nitrous

oxide. Process changes associated with elevated ambient temperatures are directly related to increased anthropogenic greenhouse gas (GHG) emissions in the atmosphere. It has been strongly believed that this temperature rise is caused by the emission of carbon-based compounds from the use of fossil fuels for general power generation. The greenhouse effect is a vague concept that is well understood astronomers and climate scientists and who accurately predict temperatures on earth and on other planets

#### **Keywords**

Climate, fossil fuels, deforestation, global warming, alternative energy sources. Greenhouse gases; global warming; greenhouseeffect; global temperature; atmosphere.

# <u>1.</u>

# **Introduction**

The fact that the earth has a central location pleasant temperature between boiling. Therefore, the point and the point of cold water suitable for our kind of life, cannot be defined by it simply suggests that planet Earth orbits direct spacefrom the sun just to absorb it the right amount of sunlight.

Medium temperatures are also a result of justice the exact type of space. The atmosphere of the planet Venus creates a state of hell similar to that of the planet Earth Venus The troposphere of Mars shakes the Earth with a deep freeze like Mars. The greenhouse effect occurs in the troposphere (lower atmosphere) where life and weather occur. In the absence of the greenhouse effect, the

average surface temperature is estimated to be about 19 ° C instead of thecurrent average of 14 ° C.

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Process changes associated with elevated ambient temperatures are directly related to increased anthropogenic greenhouse gas (GHG) emissions in the atmosphere. It has been strongly believed that this temperature rise is caused by the emission of carbon-based compounds from the use of fossil fuels for general power generation. It is known that the concentrations of carbon dioxide, methane, and nitrous oxide are increasing, and in recent years, large amounts of these greenhouse gases, mainly chlorofluorocarbons (CFCs), have been added to the atmosphere.

The greenhouse effect is a continuous, natural phenomenon: existing gases which works brilliantly to 'warm up' the Earth's surface from the planet. The universe was formed about four and a half billion years ago. Human

jobs, especially those associated with industrial development, are vast land removal and chemically improved agriculture, adding large amounts of these radioactive gases into the atmosphere. Right now there it seems unlikely that this level of global pollution will ever end it is unlikely that the removal of impurities will begin.

# 2.

# LITERATURE REVIEW

Print paper with Modeling carbon cycles and measurements of greenhouse gas pollution from organic and conventional farming Programs.

Provides information on carbon (C) as well nitrogen (N) flow in the soil-plant system-animalenvironment.

Model includes equilibration of C, N and power fluctuations with intended to measure climate-related CO2, CH4 and N2O resources and sinks for farmingsystems.[1]

Bjorn Ulsterman et al. (2007) published an article on carbon cycle modeling and estimation of greenhouse



gas emissions from organic and traditional agriculture. Provides information on carbon (C) and nitrogen (N) fluxes in the soil-plant-animal-environmental system. This model combines a balance of C, N, and energy flows with the aim of estimating climate-related CO2, CH4, and N2O sources and agricultural system sinks.

#### **The Solar Radiation**



#### Figure 1

The Sun radiates a huge amount of energy into space over a wide spectrum of wavelengths. Most of the radiant energy of the Sun is concentrated in the visible and near-visible parts of the spectrum. The shorter the wavelength of light, the more energy it contains. Therefore, UV light is very energetic (achieved by breaking down stable biomolecules, causing sunburn and skin cancer). The remaining 4950% of the radiant energy is distributed to wavelengths longer than the

visible light.

#### Temperature of some planets: Mars, Earth, and Venus



#### Figure 1.2

Part of the Earth's atmosphere, acts as a shield blanket of just the right thickness, and the receives enough solar energy to keep the average Earthtemperature

within an interesting range. Mars cover is too thin, Venus cover is too thick. The "ceiling" referred to here as is called a collection of gases in the atmosphere called greenhouse gases, based on knowledge that greenhouse gases trap heat like the glass walls of a greenhouse increase.

#### 3. Challenges to Reducing Greenhouse Gases

Currently, it is difficult to control GHG emissions from various wastewater treatment plants. The uncertainty of measurements and the lack

of transferable data still hinder the accurate and necessary quantification process for greenhouse gas emissions. Climate change is already happening: temperatures are rising, drought and wild fires are starting to occur more frequently, rainfall patterns are shifting, glaciers and snow are melting and the global mean sea level is rising. The objectives of this study are climatic factors (greenhouse gas emissions, agricultural methane emissions, industrial nitrous oxide emissions), air pollution (carbon dioxide emissions), and energy sources (nuclear). It is to investigate the long-term relationship between (energy). Oil, gas and coal-fired; fossil fuels in panels of 35 developed countries from 1975 to 2012. To achieve this goal, this study uses advanced panel econometric techniques such as panel cointegration, fully modified panel OLS (FMOLS), and dynamic.The results show that there is a long-term relationship between the variables.

# <u>4.</u>

# **Greenhouse Effect**

The greenhouse effect is caused mainly by solar energy interaction with the greenhouse gases such as carbon dioxide, methane, nitrous oxide and fluorinated gases in the earth the atmosphere. The ability of these gases to capture heat is what causes the greenhouse theresult.



Figure 1.3

Definition Radiation: Energy propagating in the form of electromagnetic waves. Incident solar energy is called solar radiation. • Solar radiation warms the earth. The warmed earth radiates heat. But this does not mean

"heat", but scientifically energy. The correct term is infrared radiation. Atmospheric "blankets" are gas molecules in the atmosphere. Solar energy reaches the surface of the earth. The surface of the earth absorbs energy and becomes hot. The

gas is excited and emits more radiation.

# 5. Impact on Environment of Greenhouse Effect

1.

# **Global warming**

Since increasing global warming greenhouse gas concentrations lead to a decrease in outward infrared radiation, the Earth's climate needs to change in some way to restore the balance between outward longwave and outward longwave radiation. This "climate change" includes the "global warming" of the Earth's surface and lower atmosphere. This is because warming is the easiest way for the climate to

release excess energy. However, a slight increase in temperature causes many other changes, such as cloud cover and wind patterns.

#### 2.

#### Sea

Level rise When global warming occurs, sea level rises through two different processes. First, when the temperature rises, the sea level rises due to the thermal expansion of seawater. Second, melting glaciers and water from the Greenland and Antarctic ice sheets will also add water to the ocean.

# <u>6.</u>

#### **Conclusion**

This study shows that activities related to power generation and energy consumption are associated with emissions that can affect greenhouse gases, the main cause of imminent global warming. In reality, anthropogenic greenhouse gas emissions from energy activities are higher than greenhouse gas emissions from other human activities. In essence, the study also supported the need to strategically work on greenhouse gas reductions to prevent the sacredness of global ecological credibility for the interaction of sustainable development and biodiversity.

The papers described here are only part of a very complex scientific

and technical research. Global warming is a major threat and appropriate measures need to be taken to address this serious problem. This

problem affects not only humans but also animals and plants. Melting polar ice caps can cause floods and cause havoc everywhere. Rising sea levels destroy agriculture and fishing activities. To address these issues, some corrective actions need to be taken in a timely manner, including the use of

renewable energy sources and the prevention of deforestation. Innovative solutions need to be developed to completely end this threat.

# <u>7.</u>

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