
Global Warming: Key Factors and Solutions

Main Factors of Global Warming and its Solution

Global warming has been defined by scientists as the rise in temperature of the Earth as well as the climate change that leads to an increase in the average temperature. Global warming entails a number of serious environmental issues; thus has a variety of factors. The rise in temperature has changed the various living conditions across the globe, with the factors causing the change being categorized into human and natural influences.

Human Factors causing Global Warming

Human influence on global warming is increasingly becoming an issue of major concern as human beings have been neglecting their responsibility of taking care of the globe. Research reveals that human causes of global warming are more severe than the natural causes. Many changes have been reported on the earth due to the actions of man but the changes are continuing to be more visible due to the modern lifestyles of human. The activities of man that are evidently causing global warming include industrial production, excavation of minerals, burning of fossil fuel, and bringing down of forests (Tesar, 1991).

In the industrial revolution, industries have been utilizing fossil fuels as a source of energy in production. The entire production process revolves around the use of fossil fuel as everything that man uses it fossil fuel itself. For instance, some of the machinery used by humans are fossil fuels while the process of manufacturing the devices also involve the burning of fossil fuels. While the machines are being used, carbon dioxide is being emitted into the atmosphere; thus having an impact on global warming. The harmful gases are also released in the service industry such as the transportation industry. The increase in populations in most of the major cities has led to an increase in the number of vehicles; hence increasing the emission of harmful gases. Mining process encourages the trapping of methane below the earth, a similar activity that is noted when cattle is reared by man on earth (Tesar, 1991).

Deforestation of Tropical Forests for Wood, Paper, and Pulp

Deforestation is a human influence that involves the cutting down of trees for commercial use search as manufacture of paper and sale of timber for construction. Cutting down of trees encourages the concentration of carbon dioxide in the atmosphere as the trees that absorb the gas are reduced in number. The enormous global population breathes out carbon dioxide while the gas may not be fully utilized by plants.

Emissions from Fossil Fuel Burning in Power Plants

The power that human beings use for domestic purposes is generated by power plants through the burning of coal. Coal burning is proved by scientists to release large amounts of carbon dioxide that gets concentrated in the atmosphere. It is proven that large amounts of harmful gases in the United State atmosphere come from electricity production that involves burning of coal. The emission is approximated at 40% of the U.S. carbon dioxide emissions. The electricity

generated does not account for the high percentage of carbon dioxide. It is the coal burning that contributes greatly to the menace. Research on electricity usage at homes asserts that the increase in reliance on electricity is due to the high number of electrical gadgets at home. The high reliance on electricity encourage the burning of coal for more power; thus the increase in harmful carbon dioxide in the atmosphere. Apart from the commercial supply of electricity by the power plants, coal is also burnt by the same plants for personal use (Houghton, 1997).

Emission of Carbon Dioxide from Burning Gasoline for Transportation

The car culture in the contemporary society is responsible for a considerable percentage of emissions in the United States. For instance, 33% of emissions in the U.S. come from the transport industry. The population is reportedly growing at a faster rate; hence the need for more cars and consumer goods. Consumer goods are processed and manufactured through processes that lead to gas emissions. The consumption of the large population at homes has outpaced the invention of useful ways to reduce the harmful effects to the atmosphere. There is also no insight on ways of reducing or making the massive consumer culture environmental friendly (Houghton, 1997).

Methane Emissions from Animals and Agricultural practices

Apart from carbon dioxide, methane has been confirmed by scientists as another potential greenhouse gas. The gas is explained in scientific terms to be produced when organic matter is being broken down by bacteria in conditions that do not support the existence of oxygen. Methane production also takes place in the bodies of domestic herbivorous animals that are reared by humans in large numbers. With an increase in agricultural activities and the number of cattle being reared to sustain the growing human population, methane is also constantly getting concentrated into the atmosphere. The greenhouse gas is also trapped in the arctic seabed in the form of ice. As the gas escapes, the global warming rates increases significantly. Although the methane that gets trapped at the seabed occurs naturally, its impact in the atmosphere become severe when the methane released from agricultural activities combines with the naturally occurring methane (Khalil, 1993).

An Increase in the Use of Chemical Fertilizers in Farming

In the past, animal manure was used for farming practices while the modern world encourages the use of chemical fertilizers because of the increase in the number of factories manufacturing the fertilizers. The fertilizers include those that are rich in nitrogen that has an impact on the heat storage by soil. The excessive application of nitrogen fertilizers leads to the creation of dead zones in the oceans as well as a concern for the health of human beings. Nitrogen is said to have an extraordinary heat-trapping capacity per unit volume as compared to other gases such as carbon dioxide. Statistical data reveal that nitrogen is 300 times more likely to trap heat than carbon dioxide.

Natural Important Factors of Global Warming

Natural Rotation of the Earth

Greenhouse gases are also emitted naturally into the atmosphere by naturally occurring

activities. Natural rotation of the earth is also a significant factor that causes global warming. The rotation of the earth changes the intensity of sunlight as the intensity moves closer to the earth. Harmful gases such as Carbon monoxide and Sulphur are trapped in the solar heat rays, preventing it from escaping from the earth surface. The failure of the greenhouse gases can cause the temperature of the earth to increase (Lutgens & Tarbuck, 2000).

Volcanic Eruptions

Volcanic eruptions also cause global warming naturally without the influence of human beings. During the process of volcanic eruptions, harmful gases are emitted into the atmosphere that traps the heat being emitted by the sunlight. Gases such as carbon dioxide are released from volcanic eruptions and the ash that is thrown into the sky. An increase in carbon dioxide levels and the particles in the sky lead to an automatic increase in global warming. The greenhouse also traps the solar radiations in the earth (Lutgens & Tarbuck, 2000).

Naturally Occurring Methane

Methane causes global warming alongside other gases such as carbon dioxide and nitrogen in the soil. Methane is also a greenhouse gas that is more effective in trapping heat than carbon dioxide. Methane gas can be naturally released in various ways. It is emitted during land filling and in petroleum systems. The methane that gets trapped in the sea bed in the form of ice also escapes into the atmosphere, leading to global warming (Khalil, 1993).

Solutions to Global Warming

No single solution exists to the challenge of global warming that has continued to cause havoc. Global warming has led to several threats and continues to cause threats such as rise in sea levels, extinction of endangered species, and change in climate. The solutions to global warming can result in the carbon dioxide levels and other greenhouse gases being brought down to levels that could have an impact on climate change and melting of glaciers.

Use of Energy Efficient Products

Encouraging the use of energy efficient products such as fluorescent bulbs that save energy and emit no harmful gases would reduce global warming. As noted earlier, energy produced by electronic devices leads to global warming. Energy efficient electronic gadgets would, therefore, be efficient in curbing the havoc.

ii. Eliminating Fossil Fuels

Phasing out the fossil fuels in power plants that greatly depend on them for energy production would reduce the amount of harmful gases being emitted into the atmosphere. The power plants would be encouraged to utilize natural resources such as fast flowing waters from the large water bodies to produce energy.

Using Nuclear Energy.

Although it has been confirmed that nuclear energy is harmful to the health of human beings

and their security, going nuclear would be vital in reducing global warming. The nuclear energy is harmful to use but it can be used responsibly to reduce global warming drastically. Incidences such as the historical bombing of Hiroshima and Nagasaki pose a great challenge in the use of nuclear energy.

Stopping Deforestation

Encouraging the planting of trees would mean more absorption of greenhouse gases that are responsible for global warming. The war on global warming can be improved by reducing deforestation and stopping forest degradation. The management of forests could be included in the activities of agricultural industry in the government and international communities.

Use of Public Transportation

The culture of cars in the modern world could be altered by encouraging the use of public vehicles to save energy and to reduce the amount of harmful gases being emitted in the atmosphere. The use of public transport would also reduce traffic on the roads; thus, the method is seen as both economical and effective.

The Use of Renewable Energy

Renewable sources of energy such as the sunlight, wind, and geothermal power could be explored to reduce the impact of harmful sources such as coal. The technologies that have been in existence can be explored to enhance their efficiency and in the long run reduce global warming.

In a nutshell, global warming is caused by natural and human factors that can be controlled by humans through technological innovations. Solutions to global warming encourage the use of environmental friendly energy as well as energy that is friendly to the pocket. With the current generation that is characterized by modern lifestyle, it should be the responsibility of everybody to reduce global warming through every means that involves taking care of the earth.