

A STUDY ON “WAYS OF REDUCING GLOBAL WARMING”

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INTRODUCTION

Definition:

Now-a-days, global warming, or climate change, is considered to be one of the most common disasters facing the world. It can be defined as the average rise in the temperatures near earth's surface. Every day, the problem of global warming is getting worse. According to EPA (2013), there was an increase of 1.4°F in the average global temperature over the last 100 years and it is predicted to increase another 2°F over the coming century. This increase is a result of an effect of certain gases existing near the earth's surface called greenhouse gases.

REVIEW OF LITERATURE

Greenhouse effect:

Greenhouse effect is the phenomena resulting from the role that greenhouse gases play in forming global warming. The most effective greenhouse gases are “carbon dioxide (CO₂), methane (CH₄) (which is 20 times as potent a greenhouse gas as carbon dioxide) and nitrous oxide (N₂O), plus three fluorinated industrial gases: hydro fluorocarbons (HFCs), per fluorocarbons (PFCs) and sulphur hexafluoride (SF₆)”(Shah.2012) and water vapor. Shah (2012) implies that when sunlight hits earth and reflects, much heat, energy, is captured or absorbed by these gases and is prevented from escaping out of earth. That directly results in warming the regions that are close to earth's surface and is considered the direct reason for global warming.

Statistics:

Greenhouse gas emissions are produced in different ratios by each country. CO₂ has the greatest effect on global warming

Nowadays, global warming, or climate change, is considered to be one of the most common disasters facing the world. It can be defined as the average rise in the temperatures near earth's surface. Every day, the problem of global warming is getting worse. According to EPA (2013), there was an increase of 1.4°F in the average global temperature over the last 100 years and it is predicted to increase another 2°F over the coming century. This increase is a result of an effect of certain gases existing near the earth's surface called greenhouse gases.

(Tejvan. 2012) (EPA. 2008)

CO₂ emissions range from 18.6 metric tons in Australia to 0.1 in Uganda. As seen, It can be easily noticed that Australia has the largest number of emissions released per person, 18.6 metric tons. America has 18.0 metric tons of CO₂ emissions released per person and this is a large number compared with that of figure 1. Likewise, Even though Canada has a low percentage of emissions, it produced about 16.3 metric tons CO₂ emissions per person and it comes in the third position after Australia and America. Russia, Germany and other countries release much emissions than expected by seeing figure 1. Governments of countries should try reducing these numbers as possible as they can.

In this report, after showing some causes and effects of global warming, I am going to discuss two of the main solutions that can help us to reduce global warming which are energy conservation and recycling.

II. Causes of global warming:

Fossil fuel:

Global warming is a consequence of several causes. One main factor leading to global warming is burning fossil fuel. Fossil fuel is organic substances that can be burnt and are derived from the remains of prior life. Coal, natural gas and oil are the most used forms of fossil fuel. There are very large amounts of carbon dioxide released by fossil fuel into the air and carbon dioxide traps the heat from escaping out of earth. Consequently, more heat captured by CO₂ increases and leads to overall increase in the temperatures near the surface of earth which is global warming.

Below shows the changes in the three most used forms of fossil fuels, coal, oil and natural gases, between 1994 and 2011. (Our finite world.2012)

Firstly, as seen, oil is produced in more amounts than natural gases and coal. Even though natural gases used fell between 2008 and 2009, they have an overall upward trend. Oil has almost the same pattern of natural gases with decreasing in two years. Among the three forms of fossil fuel, coal has the largest rise in the amount produced since it rose from approximately 2.2 to 3.5 million tons between 1994 and 2011. The rise in these amounts of fossil fuel is most likely to enhance global warming.

Deforestation:

Another main cause of global warming is deforestation. Manali (2013) Oak has defined deforestation as “a process of cutting trees to make space for pastures or for industries and households of the ever-increasing human population”. Deforestation has a significant effect on climate change as it causes “an increase in the amount of carbon and other greenhouse gases in the environment” because “Trees contain a major portion of carbon from the atmosphere.”(Manali. 2013). Because of that, deforestation is one of the major causes of climate change.

The main Consequences of global warming:

Speedy increase in global temperatures:

On the other hand, the resulting global warming has several adverse consequences. One of the main negative results caused by global warming is the speedy rise in global temperatures. If temperatures carry on increasing, the ice on earth will melt faster. As a result, that will raise the sea level and we are going to have many coastal cities and islands expected to be covered by water. Additionally, while air masses move from hot to cold, and temperatures increased near the surface, there will be more difference between warm and cold air masses and air will move faster which directly leads to more storms.

Energy conservation:

One way to reduce global warming is to conserve energy. Energy conservation can be defined as to reduce the amount of energy consumed or making sure it is used as efficiently as possible. In other words, we shouldn't use energy we don't need. “Replacing one frequently used bulb with a compact fluorescent bulb saves 500 lbs of CO₂ per year” (PSR.2009). So, conserving energy is an efficient way of reducing global warming.

Recycling:

Another efficient way that can reduce global warming is to recycle. Recycling is the production of a new product from a previously used material. According to Campaign for Recycling (2013), recycling soda cans reduces the greenhouse gas emissions by 95% which is a very high decrease and PSR (2009) recommends “reduce what you consume. Recycle instead of throwing away old items”. By that way, we are not in need of lots of products to use. As a result, greenhouse gas emissions coming from the consumption of energy would be reduced and that would significantly slow global warming if it was seriously applied

Conclusion:

Conserving energy and recycling are two of the main effective ways that could significantly help reducing global warming. Over time, the presence of greenhouse gas emissions increases, so they would trap more heat and the problem of climate change would be worsen. I recommend the governments of all countries to work on starting an awareness program that introduces the importance of the problem for people and cooperate with each other trying to, at least, slow the problem of global warming.

Bibliography:

Campaign For Recycling, "How Does Recycling Decrease Greenhouse Gas Emissions?". <http://www.campaignforrecycling.org/faq/ghg>. Campaign for recycling. Web. 28 Apr 2013.

EPA. "Climate Change: Basic Information" <http://www.epa.gov/climatechange/basics/>. EPA. Web. 14 Apr 2013.

EPA, Global Greenhouse Gas Emissions Data. 2013. Chart.

<http://www.epa.gov/climatechange/ghgemissions/global.html> Web. 11 Apr 2013.

<<http://www.epa.gov/climatechange/images/ghgemissions/GlobalGHGEmissionsByCountry.png>>.

Manali, Oak. "Global Warming and Deforestation."

<http://www.buzzle.com/articles/global-warming-and-deforestation.html>. Buzzle. Web. 26 Apr 2013.

Our Finite World, . World fossil fuel supply. 2013. Photograph.

<http://ourfiniteworld.com/2012/12/19/why-world-coal-consumption-keeps-rising-what-economists-missed/> Web. 12 Apr 2013.

<<http://gailtheactuary.files.wordpress.com/2012/12/world-fossil-fuel-supply-oil-natural-gas-coal.png?w=640>>.

PSR, . "Personal Actions to Reduce Global

Warming." <http://www.psr.org/chapters/oregon/global-warming/personal-actions-to-reduce.html>. Physicians For Social Responsibility. Web. 27 Apr 2013.

Shah, Anup. "Climate Change and Global Warming Introduction." Global Issues. 05 Mar. 2012. Web. 17 Apr. 2013. <<http://www.globalissues.org/article/233/climate-change-and-global-warming-introduction>>.

Tejvan , Pettinger. List of CO2 Emissions per Capita. 2012. Chart. economics help Web. 19 Apr 2013. <http://www.economicshelp.org/blog/wp-content/uploads/2012/11/list-countries-co2-per-capita.png>