Should society act now to forestall global warming

Environment, Global Warming



Global warmingis not a new concept; we attribute this to "greenhouse gas" emissions. We see the effects of greenhouse gases on theenvironmentas each year passes. It is assumed that the Earth will continue to warm as time goes on. Do we need to do something about this now or should we do nothing? There are issues to be considered including, "If we do something about it, who will pay for the changes, and by changing things will we create more problems?" Some people are ready to address these issues now and others are arguing that it may be best to do nothing, according to how much cost will be incurred in finding solutions.

We will look at opinions from experts in an attempt to reach a conclusion, although I personally feel the world will benefit by slowing down our use of fossil fuels, enacting an increase in reusing everything we can in order to eliminate waste and clean up our environment in response to so many years ignoring a potential problem. Global warming is a threat now and will continue to worsen. Scientists have known for more than a century that carbon dioxide and other "greenhouse gases" (including water vapor, methane and chlorofluorocarbons) prevent heat from escaping the Earth's atmosphere.

Since the industrial age, it has been concluded that fossil fuels have provided power for these operations, releasing carbon dioxide into the atmosphere. Further calculations indicate that as the climate continues to warm, more carbon dioxide will be released into the atmosphere by human population and the use of fuel emissions released. (2) As a result, soil will become dry, more forest fires will occur, plant pests will increasingly multiply, and

seabed's methane will be released, creating a " runaway greenhouse effect.

(2)

As predicted by Jeremy Legget in "Global Warming: The Worst Case," polar ice caps may melt, raising the sea level enough to allow further contamination of the Earth. The ongoing disruption of the Earth's climate by man-made" greenhouse gases" is already well beyond dangerous. According to John Eades: Over the last several decades, data on temperature, etc. have been collected by the World Meteorological Organization (WMO) from 17, 000 identical land weather stations and 10 meteorological satellites, as well as from many research ships on data gathering cruises.

Overall, the change in the 20th century is +0. 85K. There have been constant periods in 1910 and 1940-1970. According to Eades, this increase in such a short time frame, as compared to the 4. 5K peak-to-peak swings between ice ages and interglacial periods, warrants some sort of explanation. He works to calculate the difference in temperature change including anthropogenic effects as well as the constancy of temperature during the 1910's and the period from 1940-1970, in order to make a reasonable estimate of future temperatures and other climatic features.

He uses the Black Body concept to determine absorption and emission of radiation to explain the relationship of the Earth to the Sun. He states the Sun is the Black Body absorber and the Earth is a reflective power. He further calculates the mean equilibrium temperature of the Earth by using a formula to explain how anthropogenic properties affect the temperature change (in essence, non-natural "greenhouse gases emissions"). He states

that, "Were there no GHG's the atmosphere would be perfectly transparent, the surface would remain at the mean temperature and we would simultaneously freeze and starve to death.

The purpose of the study shows a difference between the mean temperature of the Earth and what is calculated by adding the presence of GHG's in the atmosphere since the Industrial Age. Mr. Eades hypothesizes that increased use of fossil fuels will lead to atmospheric demise. (2) After much calculation, he makes it apparent that a rebalance will affect change for benefit, yet we may already be too late.

The National Oceanic and Atmospheric Administration announced that 2005 and 2010 are the warmest years in the temperature record. Under midrange projections for economic growth and technological change, the average urface temperature in 2050 will be about 2 degrees C higher than the preindustrial age value. It's been determined that Earth was warm 130, 000 years ago, and the sea level was 4 to 6 times higher than now. Al Gore has raised awareness of Global Warming through his documentary, "An Inconvenient Truth." Within this documentary are the 2007 reports of the Intergovernmental Panel onClimate Change. With the U. S. moving forward in taking steps to eliminate most man-made CO2 levels, other countries are concerned about their own economic growth.

China and India have created advisory and policy bodies at top
governmental levels to deal with climate and energy issues. Brazil is also
working to better enforce nationaldeforestationlaws. On November 15,
President Barack Obama proposed rules requiring large industries to use the

"best available controltechnology" to limit the U. S. "greenhouse gases" emission. (8) The International Panel on Climate Change, (the IPCC) meets every few years to review the latest scientific findings and write reports summarizing global warming finds.

Most "greenhouse gases" emissions come from combustion of fossil fuels incinerations, factories and electricity production. (7) The gas responsible for the most warming is carbon dioxide (CO2). Other contributors include methane from landfills, agriculture, nitrous oxide, gases for refrigeration, and industrial processes, and loss of forests which would otherwise store CO2. Since 1990, yearly emissions have gone up by about 6 million metric tons of "carbon dioxide equivalent" worldwide, more than a 20% increase.

The IPCC "predicts a global temperature rise of 1. 4 degrees and 5. degrees C by 2100. (3) Predictably mass amount of agriculturally productive land will be destroyed, entire regions will disappear under rapid sea-level rise, and entire regions in arid subtropics will be uninhabitable." Through all of the expert's findings and reports, the conclusion seems to be that "greenhouse gases" are the cause of increased CO2 in our atmosphere. The bigger concern seems to be the cost needed to lower the amount of non-natural emissions, and who will pay the cost for conversion. Additionally, will it be enough change to be effective after billions have been spent?

Munich Re, the world's largest reinsurer, calculates the cost to be more than \$300 billion a year by 2050, while the IPCC estimates on the low end of \$280 billion a year. (3) Bjorn Lomborg, a statistician from Denmark, suggests in his book, The Skeptical Environmentalist, "by crude and selective cost-benefit

analysis the cheapest option is to maintain economic growth and adapt to the impacts. "Fred Singer argues that "the global warming issue is incorrect as the climate is not warming as it should according to the models" used to calculate such differences.

He says the satellite information does not include cooling the climate by clouds in the atmosphere and that clouds cool the climate rather than warm it. (3) Since this factor is left out of the calculation, he seasons that we should do nothing to rectify global warming at this point. He also argues that situating satellites in space is a waste ofmoneyand that money could be better spent on the factors at hand and less on satellite installation.

According to Singer, "\$2 billion a year is spent on climate research"...which allows more scientists to get on the bandwagon so they can get money from the research program.

He suggests Kyoto Protocol is incorrect in attempting to sequester all CO2 as it is good for the atmosphere and makes plants grow abundantly faster.

Several people insist on more research before anyone can begin to plan a proper response. Richard B. Stewart and Jonathan B. Wiener, in "Practical Climate Change Policy; Issues inScience and Technology(Winter, 2004) declare, "It's time for a new pragmatic approach," meaning a new approach with more emphasis on costs and benefits.

Fred Krupp, President of Environmental Defense, in "Global Warming and the USA; Vital Speeches of the Day" (April 15, 2003) recommends a market-based method to finding and developing innovative approaches. (3) At this point, 126 countries have adopted the Kyoto Protocol. President George W.

Bush refused to honor U. S. commitments claiming that, " reducing carbon emissions would be too costly for the U. S. economy."

He said, "We're going to put the interests of our own country first and foremost." If the U. S. continues to refuse to comply with the Kyoto Protocol, it will have serious ramifications of U. S. Corporations engaged in international business. The bottom line would be loss of revenue and a deeper recession for the U. S. According to a Christian Science Monitor Article, the United Nations announced recently that it wouldfinancean independent review of the IPCC, which faces accusations of scientific misinformation and potential conflicts of interest. On December 4, 2009, Peter N. Spotts reports that some E-mails of several climate researchers were hacked. This calls for greater transparency in the UN body that provides governments with scientific advice on global warming.

Some have called this issue, "Climategate" and concerns around 1, 000 E-mails and files leaked or hacked from computers at the University of East Anglia's Climatic Research Unit in Britain. (6) Some of the E-mails depict a small, influential group of scientists – several of whom did work concerning global temperature trends over the past 1500 years in an effort to prevent skeptics of their r work from gaining access to raw data. Other E-mails suggest some researchers manipulated data and tried to block publication of papers that called their work into question.

One E-mail urges colleagues to destroy E-mails related to work on the 2007 IPCC reports on global warming. In Washington, the Republican Party sent a letter to the U. S. EPA on December 2, 2010 requesting the agency back off

of trying to regulate carbon dioxide emissions under the Clean Air Act until it can show that, "the data's integrity underlying these regulatory decisions had not been compromised." Each of the resources used seem to try and sway public opinion for or against working to find solutions and/or spending money to that end. While most all of the information appears to be exactly correct, some opinions are uneducated guesses.

In light of the E-mail hackings, one has to question the accuracy of all reports, which started the controversy. While all can see an increase in "greenhouse gases" emissions, it seems there can be no agreement as to whether anyone should actually "do" anything about these occurrences and findings. Some opinions report an impending doom and a need to act immediately. Other opinions suggest not enough is known about how the gases themselves affect our environment. I personally feel that heading in the direction of finding different sources of energy will continue to be an effective measure.

There are not nearly as many noxious odors present as here were around 40 years ago. I am equally aware of the need to stop polluting our highways and oceans with the mounting amount of trash scattered haphazardly. Cleaning up our individual acts seems to be a productive route to follow, and it seems very important for private organizations to do the same. In light of recent events concerning the covering up of information obtained on the subject of research into the effect of "greenhouse gases" emissions on the environment, I feel equally uneasy as others are to jump to any conclusions

and feel inspection of previously mentioned reports is vital to uncover any discrepancies.

As much as I agree or disagree with the United States government's decisions to incorporate new laws, I feel confident that our political system is working toward everyone's benefit in delaying aggressive action until further inspection has been performed. I remain undecided as to whether or not global warming is an issue of serious concern, and furthermore, if action should be enacted.

References

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