

# **A Sustainable Environment: Our Obligation to Protect God's Gift**

by  
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## **Emissions Trading is One Answer to Global Warming**

The subject of global warming has been in the news on a regular basis for the past several years. Initially, there were some people that questioned whether global warming really did exist or whether it was man made. Today, there have been many reputable reports showing conclusively that this phenomenon does exist and that it has been caused by carbon emissions, better known as greenhouse gases (GHGs). In addition to carbon dioxide, the other primary GHGs are methane, nitrous oxide, sulfur hexafluoride, perfluorocarbons, and hydrofluorocarbons.

The atmosphere around the earth allows for the sun's rays to reach the earth and an optimum thickness of the atmosphere retains enough of the heat created by these rays to warm the earth's surface. However, a substantial increase in GHGs increases the thickness of the atmosphere and thus more heat may be retained. This leads to global warming. The primary source of this increase is from the combustion of fossil fuels, such as oil, coal, and gas and from deforestation, which reduces the amount of carbon dioxide that can be absorbed by the trees. Unless this rapidly increasing global warming is curbed, we run the risk of more severe drought/precipitation cycles; longer and more extreme heat waves; spread of tropical diseases; damage to vegetation and agricultural systems; threats to coastlines and property due to higher sea levels and storm surges.

It is important to understand that the emission of GHGs causes global warming, not local warming. Although the U.S. is home to less than 5% of the world population, it emits about 30% of the world's GHGs. The treaty to reduce these emissions was negotiated in Kyoto, Japan in 1997 but didn't come into effect until February 2005 when countries representing over 55% of the world's total of GHGs signed the Kyoto Protocol. The basic provision of this treaty is that the signatory nations must reduce carbon emissions collectively to 5.2% below 1990 levels by 2010. Most nations have signed except for the U.S. and Australia. Neither President Bush's administration nor the Senate is in any hurry to establish mandatory controls across the country. The primary reason given for not signing the Kyoto Protocol is that it could have a negative impact on the country's economy. Neither the economy nor anything else will matter if global warming is not curtailed and, better yet, reversed. Fortunately, some states like California are imposing their own restrictions. China, the second greatest polluter, and India are exempt from the provisions – another reason for the U.S. not signing the protocol.

The Midwest is the most important region in the most important country in the world when it comes to solving global warming problems. Illinois, Indiana, Iowa, Michigan, Ohio and Wisconsin account for 20% of the CO<sub>2</sub> emissions in the U.S. and 5% of the world's total emissions. The Midwest alone is responsible for more global warming emissions than any country in the world other than China, the former Soviet

Union, India and Japan. It is no wonder that one possible solution to this problem originated in the Midwest.

Since the U.S. has no mandatory controls, a financial market trader and economist, Richard Sandor, created the Chicago Climate Exchange (CCX) as a means for organizations to reduce emissions voluntarily. For a small fee, a firm can become a member of CCX and agrees to reduce its carbon dioxide emissions by one percent per year below an audited base level for a committed period of five years. If the firm has the ability to reduce its emissions by greater than the committed amounts, the excess can be sold as credits to companies that did not meet their targets. The overall cost of this program is less than if each firm were required to meet an individual target. Because the reduction of emissions is voluntary in the U.S., the value of CO<sub>2</sub> credits is currently only \$1 to \$2 per ton.

You may recall that a similar “cap-and-trade” system was initiated in the early 1990s to combat acid rain. It is called “cap and trade” because the system sets an upper limit (cap) on how much can be emitted and the amount that has been reduced below the cap can be traded. Sulfur dioxide, the source of acid rain, has been reduced much faster than expected and at a fraction of the anticipated cost. This successful system served as a model for the CCX.

Once CCX was operating successfully, it formed a subsidiary in Europe called the European Climate Exchange. Since the Kyoto Protocol has been adopted by the European Union, a ton of CO<sub>2</sub> in the E.U. has traded for over \$30 per ton until a recent drop in the market caused by better-than-expected environmental performance. France, the Netherlands, Czech Republic and the Walloon region of Belgium all revealed their carbon emissions were lower than the allocation they had received. This caused a dive in the demand for credits where they are currently trading around \$20 per ton.

One might expect that a U.S. firm would want to trade its credits to a European firm for, say, \$20 per ton rather than to a U.S. firm for \$2. However, this is prohibited by the regulations of the exchanges. On the other hand, Baxter Healthcare did execute a trade between Europe and North America. Baxter transferred EU allowances to a CCX registry in the U.K. and CCX followed by canceling these allowances. Then CCX replaced the allowances into Baxter’s account in North America, thus showing the flexibility of the CCX. It is critical that carbon emissions be reduced and the Chicago Climate Exchange is only one of the ways that it can be accomplished.

Earlier this month, the movie “An Inconvenient Truth” opened at theaters throughout America. It is a documentary based on a book by the same title written by Al Gore. The movie is really the film version of presentations given by Gore throughout the world. It focuses on global warming and presents a significant amount of data substantiating the sources of the problem and extensive evidence of the damage caused to date. I highly recommend you see this movie even if you are already convinced that we have a problem. This movie presents the problem and solution in a very convincing manner. Do yourself a favor and see it.