

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

by
George P. Nassos

Do Carbon Offsets Really Help the Environment?

A few years ago, our school hosted an international conference on environmental sustainability. Since most of the attendees, as well as the host organization, really cared about the environment, we decided that this conference should be carbon dioxide emission free. After all, if the theme of the conference is protecting and restoring the environment, we should not be party to destroying it.

We assigned a student to calculate the carbon dioxide emissions created as a result of the conference. This included the carbon dioxide produced from air travel by the attendees, auto or train travel, emissions resulting from the lighting and heating of the conference rooms, the power used by the attendees in their hotel rooms, and even the carbon dioxide created by the trolleys transporting the conference guests to Navy Pier to board the Odyssey for a cruise on Lake Michigan. Oh yes, we even calculated the carbon dioxide generated by the boat, that is, our portion of those emissions. The conference produced a grand total of 30 tons.

In order to be carbon neutral, we purchased an equivalent quantity of carbon dioxide from a forest in Venezuela that plants trees which eventually sequester (absorb) carbon dioxide; i.e. removing it from the atmosphere. We included a \$3 surcharge on the registration fee for each attendee to cover the cost of \$270. We felt good about this and received a certificate certifying our purchase, but when thinking about it a little further, these trees would have sequestered the carbon dioxide anyway. So I don't think we really reduced the carbon emissions by that equivalent amount.

Carbon offsets are supposed to work by investing in projects that will reduce the carbon dioxide emitting into the atmosphere. For example, if a company installs a wind turbine that will produce one megawatt of electricity, it will replace the equivalent quantity of electricity that would otherwise be generated by, say, a coal-fired power plant that emits carbon dioxide. The owner of the wind turbine can then sell carbon credits equal to the quantity of carbon dioxide that the coal plant would have emitted if it produced the one megawatt of electricity; i.e. the carbon dioxide that it is not producing. So a wind energy plant can sell both the electricity and the carbon credits. But not all carbon offset sellers are as straight forward.

One example of a questionable company is TerraPass, a company that originated as a school project at the Wharton School of Business. TerraPass buys carbon credits from the project developers, adds a markup and then sells them to people or companies feeling guilty about emitting carbon dioxide. An example of such a project is Waste Management developing a gas-collection system to prevent the methane from the landfill

being emitting into the atmosphere. This methane is collected and burned to power a turbine-generator producing electricity. This was a voluntary effort by Waste Management back in 1999, but TerraPass didn't come along until two years ago and it is now providing Waste Management with a bonus. In general, some of these projects would have happened anyway so buying the carbon offsets really doesn't help the environment. But you may find TerraPass on travel sites offering you an opportunity to offset the carbon dioxide you will generate by flying to some destination. It is calculated by the total carbon dioxide produced by the aircraft and divided by the number of passengers on the plane.

In effect, some carbon offsets that are sold to the public are depending on the guilt of people generating carbon dioxide and willing to pay for a project that, in theory at least, will reduce emissions by an equivalent amount somewhere else in the world. One person accused of this is Al Gore who regularly purchases carbon credits to offset the carbon dioxide created by his activities. His Tennessee mansion consumes about 20 times the electricity of an average American home. The Google founders do the same thing, buying carbon credits to offset the carbon dioxide emitted by their private Boeing 767 jet. The sellers of carbon credits depend on people wanting to "feel good" about the environment as they continue to pollute.

You will also find other celebrities promoting their concern for the environment. Earlier this year at the Academy Awards, Al Gore and Leonardo DiCaprio made a pitch to fight global warming and announced that this year's ceremony had gone "green". Each of the presenters and performers was given a glass statue representing the elimination of the carbon dioxide typically generated by a celebrity lifestyle over a year. The carbon credits were purchased from TerraPass. I wonder if they deducted the emissions created by producing the statues. It seems that the sale of carbon credits is giving the rich the right to pollute. More on this topic next month.