

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

by
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We Need Action, Not Just Goals to Fight Climate Change

As you probably recall, the Intergovernmental Panel on Climate Change (IPCC) first met in 1992 to establish a road to fight the rising concentration of carbon dioxide (CO₂) in the atmosphere. So the IPCC met again five years later in Kyoto, Japan and each country set goals on how to reduce greenhouse gas (GHG) emissions by 60-80% below 1990 levels by the year 2050. However, they didn't want to wait until 2050 to see how everyone was doing, so a short-term goal was set for 15 years. The IPCC agreed to reduce emissions by only 5% within the next 15 years, a relatively simple goal. So how did everyone do? In 2012, emissions were not reduced by 5% but instead GHG increased by 58%. Recently, President Biden stated that the U.S. will reduce carbon emission 50% by 2030. Considering how little the U.S. and other countries have accomplished since 1997, I don't see how we will achieve President Biden's goal unless action plans are designed and implemented.

Earlier this month, I gave a presentation to a small group of elderly gentlemen about the current state of the environment and what can be done to improve it. During the Q&A period, I was asked whether we are doomed considering all the negative reports about increasing global warming. His concern was primarily directed for his children and grandchildren. It really doesn't look good going forward, but if we all take this issue seriously and start doing something real about it, there is hope. Jane Goodall has spent almost her entire life on improving the environment and has established her mission to spread hope. She recently said, "If young people succumb to the doom and gloom – if they lose hope – that's the end."

A climate scientist who is the president of the Pontifical Academy of Sciences recently made a statement about his concern for the young people. He said, "My granddaughter, who was born last month, will have to live in an uninhabitable world if we don't change things." His concern and that of many other people is that we take climate change and other environmental issues seriously and start doing something about it IMMEDIATELY. A recent survey of the 30 largest countries showed that their citizens are not that concerned. In Germany, 36% of its citizens are concerned about climate change, the highest percentage of any country. In the U.S., however, only 21% of its citizens are concerned. This is probably due to a lack of understanding of the current situation and where we are headed, or it may be due to false information. In either case, we can no longer depend on our governments, that is federal, state, and city, to solve these problems. As we have all read, some government leaders have other priorities above our declining environment. So let's not wait for them but, rather, let's start doing something from the bottom up to show our concern.

Many U.S. citizens feel that China is the greatest polluter, and it is more of their responsibility than ours. Today, according to James Hansen's research, China is the greatest emitter of GHG accounting for 28.8% of global emissions in 2018. So the argument by U.S. citizens is partially justified as the U.S. contributed only 14% of global GHG. However, since the beginning of the Industrial Revolution until now, the U.S. is responsible for 24.8% of the global emissions while China

is responsible for only 13.5%. On a per capita basis, the U.S. today emits about four tons per year while China emits two tons. So we don't have any excuse for not doing something as soon as possible.

While global warming, water and declining natural resources are all major environmental issues, here is a short list of some examples of things we should be looking at to improve the climate by modifying the major sources of carbon emissions.

1. All new buildings, whether commercial, industrial or residential, should adhere to LEED guidelines, or any other reputable building standard, even if certification is not sought. However, we should go further and create entire sustainable communities which would include transportation, shopping, education, product recycling, etc. Education should not only be in the local schools but also make sure that the community businesses understand sustainability strategies and embed them in their operation. There should be some form of encouragement to adopt renewable energy sources like solar panels, wind turbines, or even geothermal HVAC systems.
2. Transportation can be improved by designing bicycle lanes wherever possible in order to encourage people of all ages to use bicycles rather than their cars whenever possible. For cars, traffic signals should be improved by setting them to be timed in such a way that cars driving at the speed limit will get a green light at the next traffic signal. Also, traffic lights at side streets meeting a main street should be actuated by sensors so cars are not idling unnecessarily. We should also take a close look at hydrogen powered fuel cells to see if they make more sense than lithium batteries, or does it make sense to have both. In the meantime, the auto industry should be forced to produce more efficient internal combustion cars. My first automobile was a 1961 Renault Dauphine and its efficiency was 40 miles per gallon. It was a small four cylinder, four passenger automobile that got me from point A to point B just like the eight cylinder V-8 automobiles that got 16 miles to the gallon.
3. Another source of carbon emissions and pollution is from gas powered landscape equipment like mowers and leaf blowers. Villages should pass regulations to allow only landscape equipment to be electrically powered. A recent report noted that the operation of a gas-powered leaf blower for one hour creates as much smog-forming pollution as a small four-cylinder automobile driving about 1,000 miles.
4. A large source of GHG is also from the agricultural field, specifically from farm animals that emit gases in the form of methane. More emphasis must be placed on developing different feeds for the animals that will eliminate, or at least minimize, the emission of methane type gases.
5. While this is not new, more emphasis should be placed on urban farming. With so many empty buildings in large cities, they should be converted to growing crops. This would allow for vegetable production twelve months per year and with no concern about the weather. Carbon emissions would decrease greatly with the elimination of the need to transport the product from the agricultural fields to the consumer. With urban farming the sale of the vegetables would be nearby or even on the ground floor of the building. Besides

the decrease in carbon emissions, the organic growth of these vegetables would consume about 10% as much water as would be necessary in an agricultural field.

This is a short list as there is much more that can be done.