#### **Environmentalism**

Scriptures to show how God is revealed through his creation - Ps.104:24, Ps.8, Ps.19:1-4, Rom.1:20, Rev.4:11



## **Understanding Global Warming and Greenhouse Gases**

The earth, with its enveloping blanket of atmosphere constitutes what science calls a greenhouse. This fact is not at issue. If it were not for this greenhouse effect, our atmosphere may be more like the moon, bitterly cold at night (-270 degrees Fahrenheit) and unbearably hot during the day (+212 degrees Fahrenheit). The earth's atmosphere is like a filter. Of the

incoming solar radiation, about 20% is absorbed in the atmosphere, about 50% reaches and warms the earth's surface, and the rest is reflected back up into space. As the earth's surface is warmed up, infrared radiation is emitted. It is the presence of  $CO_2$  (carbon dioxide) along with water vapor, methane, hydrocarbon, and other gases in the atmosphere that absorbs this radiation, thereby producing the warming "greenhouse effect".

## Greenhouse Gases Produced by Humans vs. Nature/God

Water: According to the U.S. Department of Energy, only about 0.28% of the total greenhouse gases are produced by humans. Water vapor is responsible for over 95%. In fact, the oceans hold 60 times more  $CO_2$  than does the atmosphere, yet it is commonly believed that man and nature divide the responsibility equally.

**Volcanos:** Over the past 250 years, humans have added just one part of  $CO_2$  in 10,000 to the atmosphere. One volcanic cough can do this in a day." (Ian Plimer, Geologist). Some estimates suggest that all the air polluting materials made by man since the beginning of the industrial revolution don't begin to equal what just three large volcanoes can do. At present, the earth seems to be in a period of active volcanism, with eruptions happening at a rate of 100 per year. Mt. St. Helens produced 910,000 metric tons of  $CO_2$ , 220,000 metric tons of sulfur dioxide, and untold amounts of aerosols.

**Agriculture:** According to the UN, agriculture is responsible for 18% of the total release of greenhouse gases world-wide. Hydrocarbons come from growing plants.

**Cows** produce both methane and hydrocarbons. The negative effect of methane is 23 times higher than the effect of CO2. It is estimated that cows produced more than two billion metric tons of CO<sub>2</sub> equivalents per year.

**Termites:** The largest source of greenhouse gases may well be termites, whose digestive activities are responsible for about 50 billion tons of CO<sub>2</sub> and methane production annually. According to the journal Science (Nov. 5, 1982), termites alone emit ten times more carbon dioxide than all the factories and automobiles in the world.

For decades we have been sold the lie to preserve the old growth rain forests. But science knows that mature trees add little in the way of CO<sub>2</sub> removal from the atmosphere. However, a forest of young, vigorously growing trees will remove **five to seven tons more** CO<sub>2</sub> per acre.

#### **Fossil Fuel**

In 1989, the oil tanker **Exxon Valdez** was exiting Alaska's Prince William Sound when it struck a reef in the middle of the night. What happened next was considered one of the nation's worst environmental disasters: 10.8 million gallons of crude oil spilled into the pristine Alaskan waters, eventually covering 11,000 square miles of ocean.

**The Deepwater Horizon** oil spill was an industrial disaster that began on 20 April 2010, in the Gulf of Mexico on the BP-operated Macondo Prospect and is considered to be the largest marine oil spill in the history of the petroleum industry. The U.S. government estimated the total discharge at 4.9 million barrels (210 million US gal.).

**But what you aren't told** that there is effectively an oil spill every day in the depths of the Santa Barbara Channel where 20 to 25 tons of oil have leaked from the seafloor each day for the last several thousand years.

# The Christian View of Environmentalism (Global Warming)

As Christians, we are not called to be protectors of the planet. It is good to be mindful of the environment (Gen. 2:15 And the LORD God took the man, and put him into the garden of Eden to dress it and to keep it.) but we don't fear global warming or the end of civilization through an environmental catastrophe.

- We understand through scripture that this world has at least 1007 years to go before it is destroyed by God.
  Genesis 8:22 While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease.
  - **Revelation 20:4-5** ...and they lived and reigned with Christ **a thousand years**. But the rest of the dead lived not again until the thousand years were finished. This *is* the first resurrection.
- We know that God oversees his earth, not man. 1 Cor. 10:26 For the earth is the Lord's, and the fulness thereof.

We look forward to a new heaven and a new earth 2 Pet. 3:13 Nevertheless we, according to his promise, look for new heavens and a new earth, wherein dwelleth righteousness.
 Revelation 21:1 And I saw a new heaven and a new earth: for the first heaven and the first earth were passed

away; and there was no more sea.

## the Anthropic Principle (Isaiah 45:18)

Anthropic means "relating to human beings or their existence." Principle means "law." The Anthropic Principle is the Law of Human Existence. It is well known that our existence in this universe depends on numerous cosmological constants and parameters whose numerical values must fall within a very narrow range of values. If even a single variable were off, even slightly, we would not exist. The extreme improbability that so many variables would align so auspiciously in our favor merely by chance has led some scientists and philosophers to propose instead that it was God who providentially engineered the universe to suit our specific needs. This is the Anthropic Principle: that the universe appears to have been fine-tuned for our existence.

Consider protons, for example. Protons are the positively charged subatomic particles which (along with neutrons) form the nucleus of an atom (around which negatively charged electrons orbit). Whether by providence or fortuitous luck (depending on your perspective), protons just happen to be 1,836 times larger than electrons. If they were a little bigger or a little smaller, we would not exist (because atoms could not form the molecules we require). So how did protons end up being 1,836 times larger than electrons? Why not 100 times larger or 100,000 times? Why not smaller? Of all the possible variables, how did protons end up being just the right size? Was it luck or contrivance?

Or how is it that protons carry a positive electrical charge equal to that of the negatively charged electrons? If protons did not balance electrons and vice versa, we would not exist. They are not comparable in size, yet they are perfectly balanced. Did nature just stumble upon such a propitious relationship, or did God ordain it for our sakes?

Here are some examples of how the Anthropic Principle directly affects the livability of our planet:

**Water.** The unique properties of water. Every known life form depends on water. Thankfully, unlike every other substance known to man, water's solid form (ice) is less dense than its liquid form. This causes ice to float. If ice did not float, our planet would experience runaway freezing. Other important properties of water include its solvency, cohesiveness, adhesiveness and other thermal properties.

**Earth's magnetic field**. If it were much weaker, our planet would be devastated by cosmic radiation. If it were much stronger, we would be devastated by severe electromagnetic storms.

**Earth's place in the solar system**. If we were much further from the sun, our planet's water would freeze. If we were much closer, it would boil. This is just one of numerous examples of how our privileged place in the solar system allows for life on Earth.

Our solar system's place in the galaxy. Once again, there are numerous examples of this. For instance, if our solar system were too close to the center of our galaxy, or to any of the spiral arms at its edge, or any cluster of stars, for that matter, our planet would be devastated by cosmic radiation.

**The color of our sun**. If the sun were much redder, on the one hand, or bluer, on the other, photosynthesis would be impeded. Photosynthesis is a natural biochemical process crucial to life on Earth.

The above list is by no means exhaustive. It is just a small sample of the many factors which must be just right in order for life to exist on Earth. We are very fortunate to live on a privileged planet in a privileged solar system in a privileged galaxy in a privileged universe.

The question for us now is, with so many universal constants and cosmological parameters defining our universe, and with so many possible variables for each one, how did they all just happen to fall within the extremely narrow range of values required for our existence? The general consensus is that we are either here by fortuitous luck against tremendous odds or by the purposeful design of an intelligent Agent.