

An Astronomical Perspective on Global Warming

by Clark M. Thomas

Today's world is divided between those who believe in global warming, but will do very little about it – and those who don't yet believe in global warming, and do nothing about it. There is essentially no difference between doing very little globally and doing nothing at all about global warming. Humanity will try little of significance until it's too late.

It's likely already too late: Arctic Ocean ice is rapidly melting. Polar bears are drowning. Soon the Siberian tundra permafrost will thaw, releasing vast quantities of prehistoric methane, a greenhouse gas twenty times more potent than carbon dioxide. Vast quantities of methane will also burst from the warming Arctic seabed along the Siberian shelf. In two centuries much of the world will experience average temperatures not seen since the dinosaurs roamed Alaska.

Every nation acting together at great short-term cost could only delay this disaster a few decades. I am not talking about a quickie disaster, such as that from a passing hurricane. Climate changes can set in for thousands of years. What a "gift" we are giving our great-great-grandchildren.

Bottom line: It's smart to strategically plan for much higher sea levels, much higher average temperatures, tropical diseases and pests moving north, overpopulation-driven deforestation, accelerated extinctions, regional wars over scarce resources, and other previously preventable consequences of messing with Nature.

Precious billions directed to token global green actions could be better used for our boundary defenses. Large areas of the Atlantic and Gulf coastal planes will be slowly inundated. We need to think creatively about mass relocations within the next two centuries. Imagine Roanoke with a million people, and as warm as Alabama. Envision Richmond as a new sea port. What will happen to Tidewater?

Astronomers understand the awesome power of greenhouse gases. Telescopically beautiful Venus is a runaway greenhouse horrorscape with 900° F surface temperatures. Outward from our orbit, it's going to be far more economical to invest in Earth's biosphere, over some of us escaping to Mars and trying to terraform it with greenhouse gases no less.

Even though there may be several rocky planets within a hundred light years hosting simple life forms – highly evolved life with philosophical consciousness is likely very rare anywhere near our lucky orb during humanity's brief ascendancy. We astronomers can provide fellow Earthlings today with this Big Perspective, to help encourage wise, proactive plans.

Our blue orb is a tiny, infinitely precious speck floating in a vast sea of darkness. To love the delicate Earth biosphere is to love ourselves and all who follow us. Astronomy by itself is not the solution; but it can be a catalytic element in any serious attempt to deal with the worst effects of global warming.

