Why am I here?

I will tell you.

It's not for an esoteric debate over whether this or that element of earth's climate system increases or decreases the warming effect of a greenhouse gas.

It's not for a soporific discussion over the merits and demerits of this or that computer climate model, or even all climate models and their ability to project future global average temperature.

It's not to vindicate or vilify this or that energy source and the technology that harnesses it—whether wind or coal, sun or natural gas, biofuel or petroleum, geothermal or nuclear—or to support or undermine evil fossil-fuel corporations or evil renewable-energy corporations.

It's not to cheerlead for, or beat up on, this or that group of environmental or economic or social or religious activists, whether they're liberal or conservative, libertarian or progressive, socialist or capitalist, Democrat or Republican.

It's not to lavish praise on all who agree with me and heap scorn on those who don't, or to claim overwhelming consensus in support of my views or patronizingly remind those who do so that consensus matters in politics but not in science, or to remind them that the history of science is filled with the abandonment of consensus on questions large and small.

Why am I here?

I'm here because I'm convinced that for the global community to fight "climate change" by drastically limiting emissions of carbon dioxide into the atmosphere is for it to condemn billions of our neighbors to prolonged poverty and the miseries that accompany it, including high rates of disease and premature death, and to force millions who have escaped poverty back into it.

I'm here because I'm convinced that for the global community to fight "climate change" by drastically limiting emissions of carbon dioxide will necessitate enormous expansion of government control over our lives at every level, from home to workplace to world, undermining the precious heritage of liberty in those few societies that have achieved it and barring the path to it for the rest.

Those are outcomes I don't wish to see. They're outcomes I wish to prevent.

And that's why I'm here.

Because I want to enlist your help in persuading policymakers here and around the world to reject policies to limit CO_2 emissions and support instead policies that pave the way for the world's remaining 1.4 billion people suffering in abject poverty to rise out of it and, along with another 4.1 billion, to achieve the levels of prosperity now enjoyed by the world's most prosperous—and therefore healthiest and longest-lived—1.5 billion.

That's why I'm here.

I want to enlist your help in persuading policymakers to preserve and expand liberty, not reduce it.

That's why I'm here.

As a plenary speaker for the 2012 annual meeting of the Evangelical Theological Society, the theme of which was the care of creation, I ventured to voice my reasons for rejecting fears of catastrophic, anthropogenic global warming. Two of the three other plenary speakers—both New Testament scholars—responded with ridicule and scorn.

One told me, "Stop playing silly games with pseudo-science, and wake up to what's really going on in the world!"

The other compared anyone who questioned catastrophic, anthropogenic (that is, manmade) global warming with an uneducated country pastor who couldn't read the Greek alphabet and so would pronounce the Greek `gar` as *yap*.

As if ridiculing me as an individual weren't enough, one also reproved the Evangelical Theological Society for even having invited me, saying "to invite different perspectives on [catastrophic, anthropogenic global warming (which henceforth I'll call CAGW)] would be sort of like, 'Let's have a conference on Jesus in which we have equal representation by those who think Jesus existed and those who don't think he did'," and the other agreed.

Consistent with the "way off in the margins" idea, both repeated the widespread—and false—claim that "97% of scientists agree" that CAGW is real.

It seems the Greer-Heard Forum and New Orleans Baptist Theological Seminary disagree. They have the courage to invite not just one CAGW skeptic but three to speak to you.

For that I not only thank them but also encourage you to join me in applauding Dr. Robert Stewart, the other organizers, and the sponsors of this forum.

When political correctness reigns and some people have gone so far as to call for imprisonment or even death for CAGW skeptics, it takes some courage to do what our hosts have done.

I must say that, though I've read some 50 books and thousands of articles, including hundreds of peer-reviewed journal articles, on the science of climate change, and likewise some 30 books and thousands of articles on the economics of climate policy, my two fellow CAGW skeptics both not only outstanding scholars but also serious disciples of our Lord and Savior Jesus Christ, stand head and shoulders above me in their understanding of the complex scientific and economic issues in the climate-change debate.

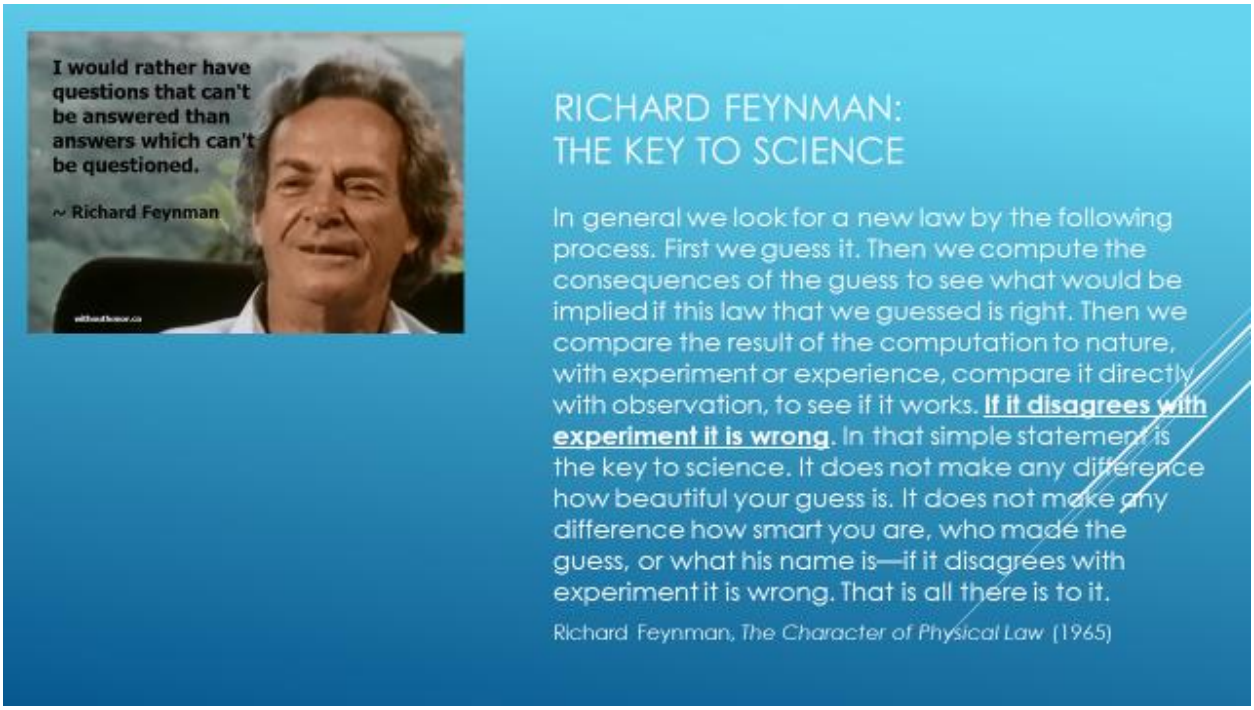
Dr. John Christy has undoubtedly forgotten far more climate science, and Dr. Ross McKitrick far more of the economics of climate policy, than I have learned, yet what each remembers no doubt exceeds my knowledge by orders of magnitude.

So let me share with you just a few things that make me reject the fears of CAGW, and let me begin by making sure you know just what I reject, and just what I don't.

I don't reject the reality of global warming—I affirm it, and global cooling, both of which happen cyclically, in superimposing cycles of various lengths from around the length of the sunspot cycle (roughly 11 years give or take a few), to those of ocean current cycles like the Pacific Decadal Oscillation and the Atlantic Multidecadal Oscillation, on the shorter end, to cycles that appear to run around 1,500 years, to the Milankovich cycles in the tilt of the earth's axis toward the sun, which appear to have a periodicity of about 41,000 years.

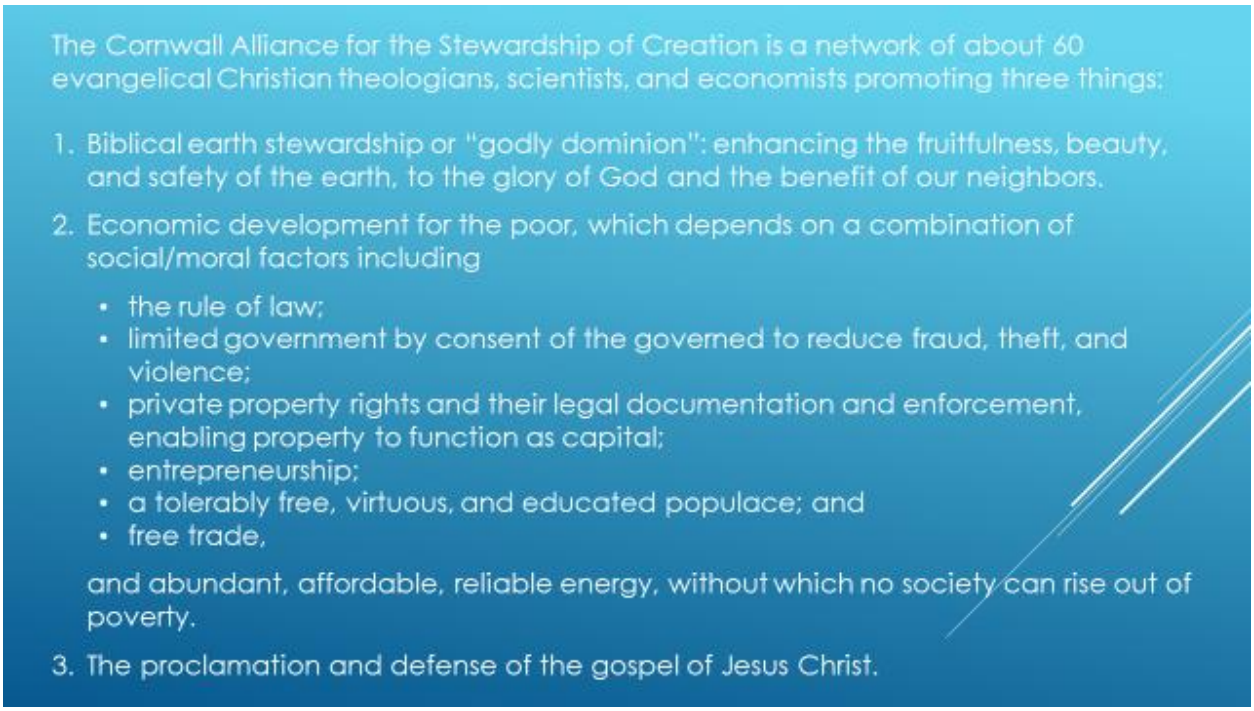
I don't reject the truth that human emissions of greenhouse gases warm the earth's atmosphere—I affirm it, but think their contribution is much smaller than the allegedly, but questionably, "conventional" or "consensus" or "standard" claim that, e.g., "climate sensitivity" (warming due to doubled CO2 concentration in the atmosphere, after all climate feedbacks have been accounted for) is most likely in the range of 2.5 to 4.5 C˚ with a best estimate of 3˚.

I'm not a "global warming denier," much less a "climate change denier," much less a "climate denier." (What in the world would it mean to "deny climate"?)



I'm not a "science denier" but a firm believer in real science, the essence of which Nobel Prize-winning physicist Richard Feynman captured when he said:

> In general we look for a new law by the following process. First we guess it. Then we compute the consequences of the guess to see what would be implied if this law that we guessed is right. Then we compare the result of the computation to nature, with experiment or experience, compare it directly with observation, to see if it works. **If it disagrees with experiment it is wrong**. In that simple statement is the key to science. It does not make any difference how beautiful your guess is. It does not make any difference how smart you are, who made the guess, or what his name is—if it disagrees with experiment it is wrong. That is all there is to it.



The Cornwall Alliance for the Stewardship of Creation, which I lead, is a network of about 60 evangelical Christian scholars, roughly one-third each of theologians, scientists, and economists, teaching or doing research at universities and research institutions around North America, working through education to promote three things simultaneously:

1. Biblical earth stewardship. Using a key term from Genesis 1:28, where we read that after creating Adam and Eve "God blessed them. And God said to them, 'Be fruitful and multiply and fill the earth and subdue it and have dominion over the fish of the sea and the birds of the air and everything that moves on the face of the earth," we call this Biblical earth stewardship "godly dominion," by which we mean men and women created in God's image laboring lovingly together to enhance the fruitfulness, the beauty, and the safety of the earth, to the glory of God and the benefit of our neighbors, and so addressing the two great commandments, to love God and to love our neighbor.
2. Economic development for the poor, which we learn from Scripture and history depends on a combination of social/moral factors including
    a. the rule of law;
    b. limited government by consent of the governed to reduce fraud, theft, and violence;
    c. private property rights and their legal documentation and enforcement, enabling property to function as capital;
    d. entrepreneurship;
    e. a tolerably free, virtuous, and educated populace; and
    f. free trade;

    plus abundant, affordable, reliable energy, without which no society can rise out of poverty.
3. The proclamation and defense of the gospel of Jesus Christ.

We do all this in a world permeated by an environmental movement whose worldview (whether secular atheism, denying the reality of God the Creator; or pantheism, in which God is the universe; or panentheism, in which God is to the universe as the soul is to the body; or animism, in which there are many gods or spirits that inhabit rocks and trees, seas and mountains), theology (with its own doctrines of God, creation, humanity, sin, and salvation), and ethics (valuing nature over culture and tending toward biological egalitarianism, hence denying the exceptionalism of human beings uniquely made in God's image) are mostly anti-Christian; whose science and economics are often poorly done; whose policies therefore often are of little real efficacy in restoring, enhancing, or protecting the fruitfulness, beauty, or safety of the earth but are harmful to human beings, especially the world's poor; and that actively seeks to infiltrate Christian churches and "green the gospel," corrupting it from the truth that Jesus Christ died for our sins according to the Scriptures, that He was buried, and that He rose from the dead according to the Scriptures (as Paul summarizes it in 1 Corinthians 15).

We are, in other words, real scholars, with real expertise in fields relevant to the CAGW controversy, and I, like the thousands of other scholars and millions of laymen with similar views, resent and condemn as morally reprehensible the attempt to tar our skepticism—the hallmark of genuine science—with a term meant to associate us with Holocaust deniers and to heap upon us, by implication, all the moral and intellectual opprobrium properly associated with Holocaust denial.

What we deny is a combination of claims that, taken together, I characterize as belief in catastrophic, anthropogenic global warming (CAGW):

1. Over the past 30 to 60 years the world has warmed at historically unprecedented rates.

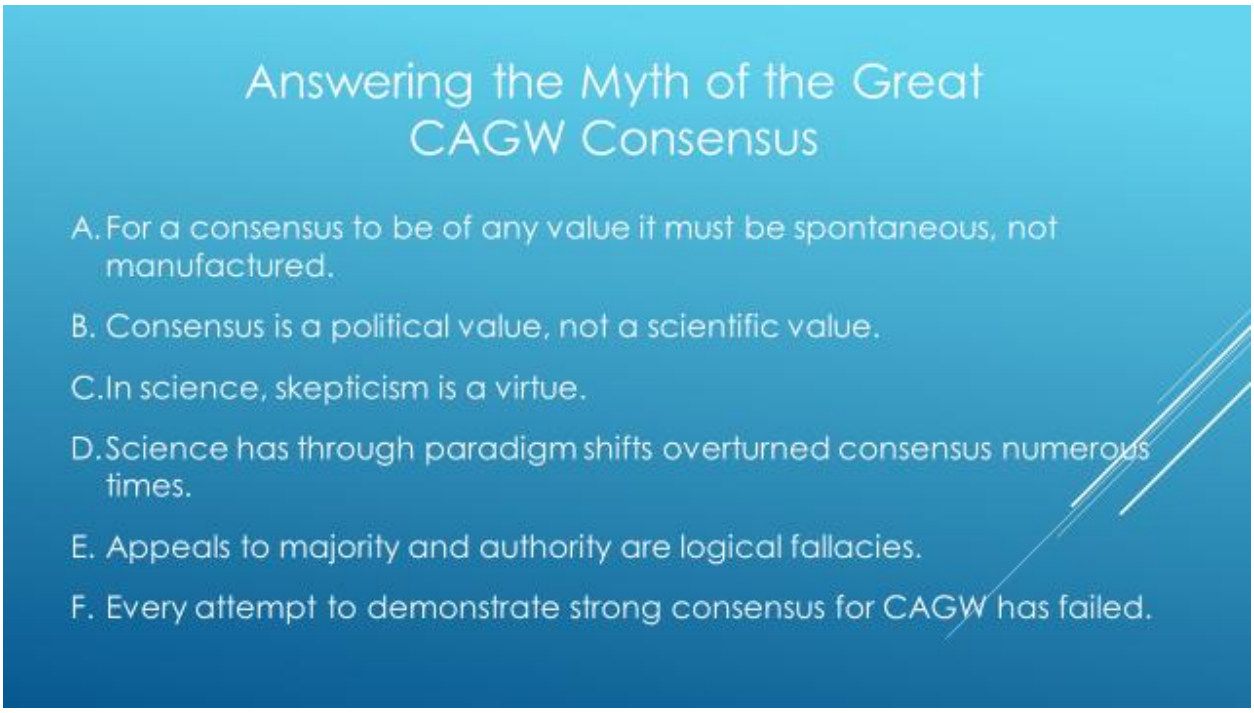
2. Human emissions of carbon dioxide and other "greenhouse gases" (mistakenly named because they don't work the way greenhouses do) are the primary drivers of that warming.
3. Left unchecked, that warming will become highly dangerous or even catastrophic.
4. It therefore behooves the global community to make drastic cuts in carbon dioxide and other "greenhouse gas" emissions to slow, stop, and reverse that trend.

I shall speak first to the science of climate change, with a little theology integrated into it; then to the economics and ethics of climate policy. I shall have to be outrageously brief and hideously selective. If you want to learn more—lots more—then after listening to Dr. Christy and Dr. McKitrick tomorrow, go to www.CornwallAlliance.org, click on the "Landmark Documents" tab, and read at least our three major papers with "Call to Truth" as part of their titles, subscribe to our free e-newsletter, and follow us on Facebook and our blog.

The Science (and a Little Theology) of Climate Change

The Myth of the Great Climate-Change Consensus

I begin my discussion of the science by discussing something that isn't science but masquerades as it: the appeal to consensus. We are constantly told that "97% of all scientists," or at least "of all climate scientists," "believe in global warming."



Ignore for the moment that for a consensus to be of any value it must be spontaneous, but, as Georgia Tech climatologist Dr. Judith Curry has demonstrated, whatever "consensus" affirms CAGW has been manufactured intentionally by the Intergovernmental Panel on Climate Change.

Ignore for the moment that consensus is a political value, not a scientific value.

Ignore for the moment that, as the philosopher of science Robert K. Merton put it, "Most institutions demand unqualified faith; but the institution of science makes skepticism a virtue."

Ignore for the moment that, as Thomas Kuhn documented so beautifully in *The Structure of Scientific Revolutions*, science has through paradigm shifts overturned consensus numerous times, and not only on relatively minor matters like the cause of ulcers or the healthfulness of dietary fat but also on such far more basic matters as continental drift, the existence of phlogiston, and whole cosmologies like the Steady State Theory, the Pulsating Universe Theory, and the Big Bang.

Ignore for the moment that Aristotle pointed out, and all logicians since have recognized, that appeals to majority and authority are logical fallacies.

Leave all those considerations aside.

The truth is that every attempt to demonstrate strong consensus on CAGW has failed. Time doesn't permit my discussing them one by one, but if you're interested, you can find refutations of some earlier ones in our 2005 *A Call to Truth, Prudence, and Protection of the Poor: An Evangelical Response to Global Warming*, available on our website, to more recent ones in Joseph Bast's *The Myth of the 98 Percent*, available online, and to what probably is the most famous one—John Cook, Dana Nuccitelli, and others' "Quantifying the consensus on anthropogenic global warming in the scientific literature," which claimed 97 percent based on examining hundreds of article abstracts,—in in a single post December 19, 2014, on WattsUpWithThat.com, listing 97 refutations of that study, especially the article "Climate Consensus and 'Misinformation': A Rejoinder to *Agnotology, Scientific Consensus, and the Teaching and Learning of Climate Change*," one of whose authors is climatologist and Cornwall Alliance Senior Fellow Dr. David Legates. Because of faulty statistical method, biased interpretation that counts explicit critics of CAGW as part of the alleged consensus, and inclusion of scores of irrelevant papers, the actual consensus of the papers Cook and Nuccitelli's team surveyed is not 97% but 0.3%.

Suffice it to say that an alleged overwhelming consensus for CAGW is devoid of valid evidence. The closest we can come to a valid finding of consensus among climate scientists is probably a survey of members of the American Meteorological Society that found that only 52% believed that global warming is happening and that human activity has caused most of it.

Computer Models, Real-World Observations, and the Key to Science

Now to some real science, which is all about testing hypotheses and theories by carefully measured observations of the real world.

Since the Industrial Revolution, human activity, mainly burning fossil fuels to provide energy, has raised atmospheric CO_2 concentration from about 280 to about 400 parts per million—or from 28 thousandths of one percent to about 40 thousandths of one percent.

The basic physics of black-body radiation, expressed in the Stephan-Boltzmann equation, tells us that doubling atmospheric CO_2 concentration (to about 560 parts per million, which we might reach late in this century) would warm the earth's surface by about 1 to 1.2 C˚ before the various feedback mechanisms in our climate—ocean, atmosphere, land, ice, precipitation, evaporation, wind, vegetation, and more—respond either to magnify or reduce that warming.

That amount of warming, or even twice that, would almost certainly be more beneficial than harmful, increasing vegetation's density and expanding its range to higher latitudes and altitudes.

For the warming to be harmful, "climate sensitivity"—defined as warming caused by CO_2 doubling after all feedbacks—must be well above 2 C˚.

The IPCC now says climate sensitivity is likely between 1.5 and 4.5 C˚, having reduced the low end by 25% in its 2013 *Fifth Assessment Report* from the 2.0 C˚ it estimated before, and now declining to offer a "best estimate," which previously it said was 3.0 C˚.

To achieve "climate sensitivity" above 2 C˚, the computer climate models behind IPCC's work must multiply pre-feedback warming by anywhere from 167% (to go from 1.2 to 2 C˚) to 450% (to go from 1 to 4.5 C˚). They do this by assuming that positive feedbacks (which magnify initial warming) exceed negative feedbacks (which reduce it) by varying ratios.

That hypothesis is plausible, but as Feynman said, it must be tested by real-world observation.

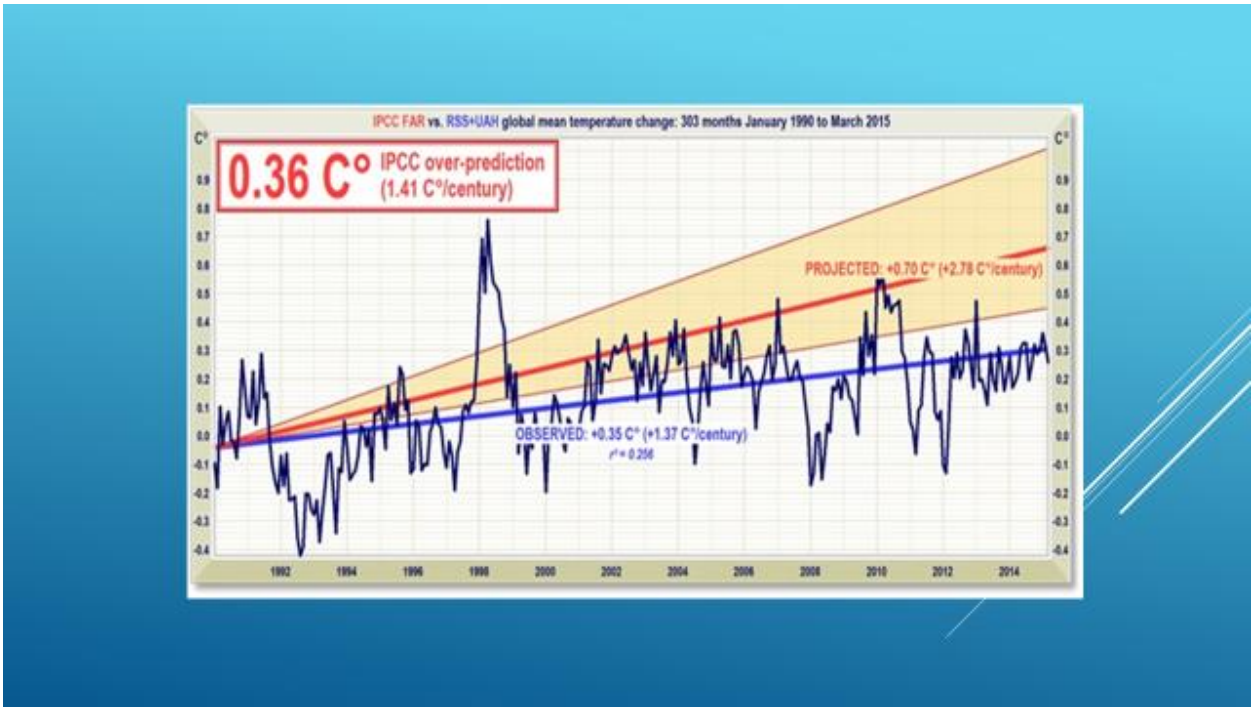
If a natural system is dominated by positive feedback mechanisms, then when perturbed by a new stimulus it will tend to generate a runaway positive feedback loop leading to catastrophic collapse.

That is not what we observe. Rather, we observe that most, perhaps all, natural systems are dominated by negative rather than positive feedback mechanisms. That means they reduce rather than magnify the impact of a new stimulus.

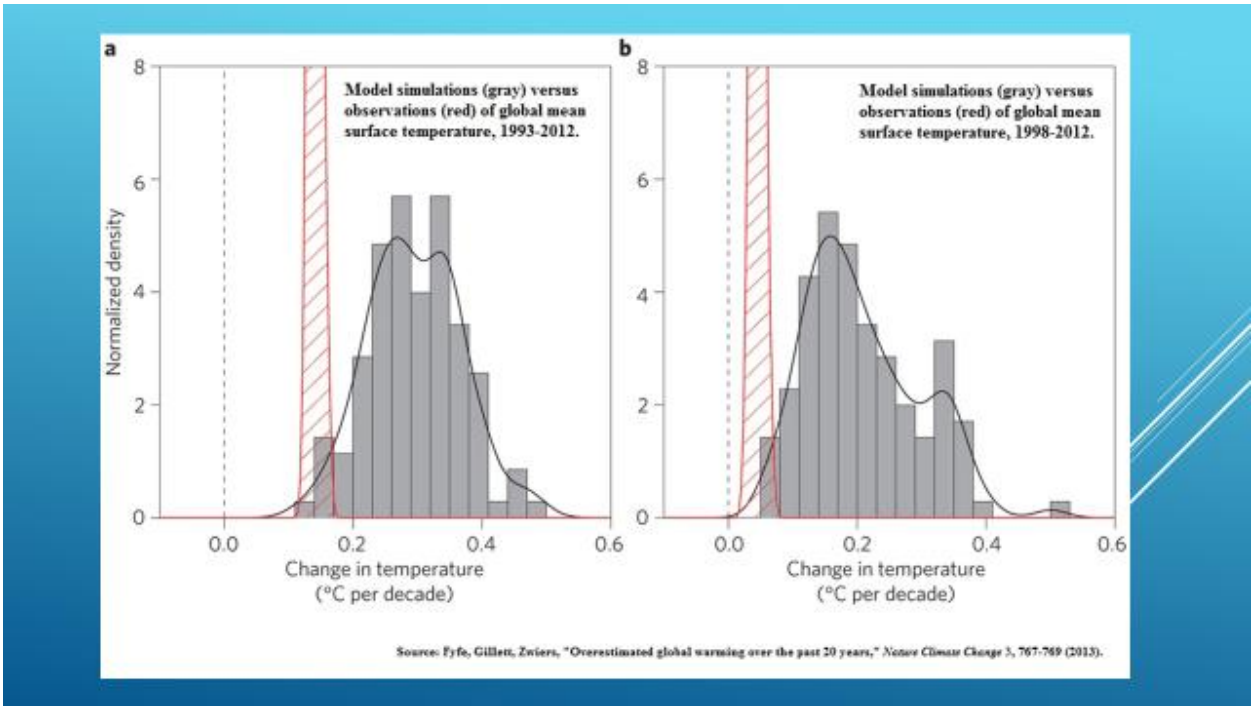
The key question is whether the climate system, specifically, is dominated by positive or negative feedbacks. The answer might be "Positive," which means initial warming would be increased, by little or by much; "Negative," which means initial warming would be reduced, by little or by much; or "Neither," which would leave initial warming unchanged.

The models answer "Positive"—indeed, "Strongly Positive," which means initial warming is increased, by much.

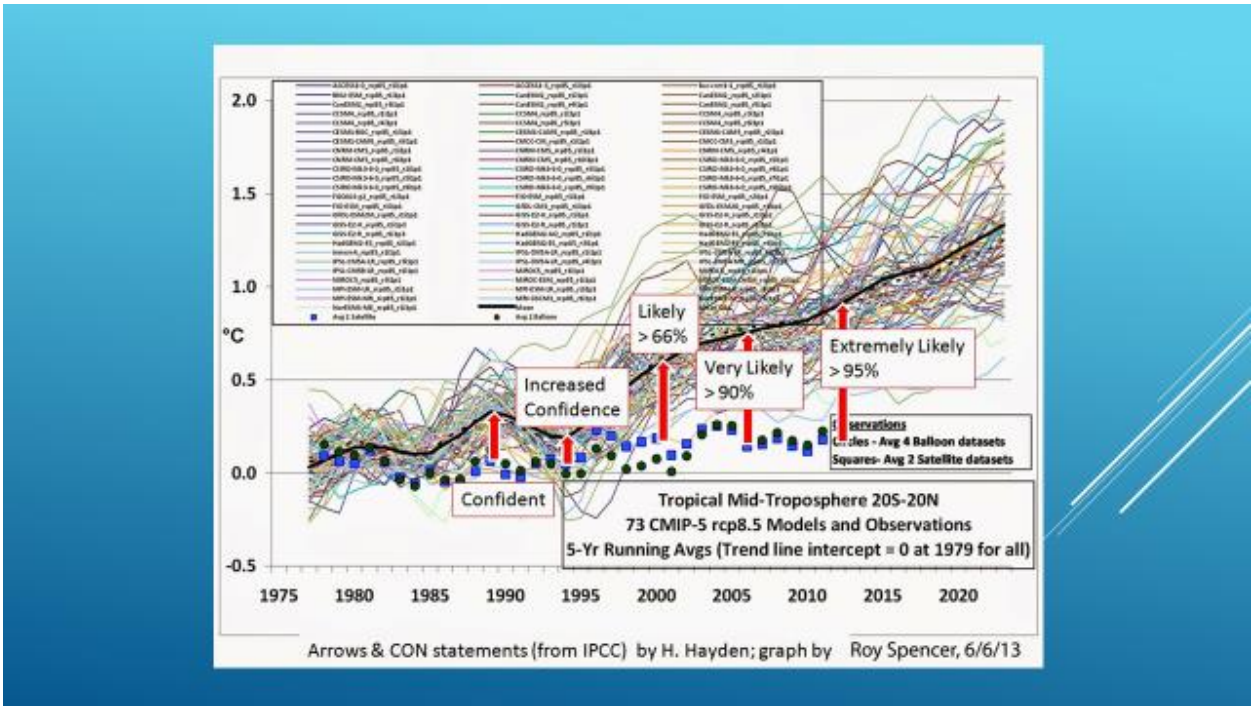
But real-world observation increasingly disagrees with that answer, in two general ways.



First, the computer models simulate, on average, twice as much warming as has been observed since January of 1990, as shown in this graph in which the shaded area is the range of model simulations, the red line is the mean of model simulations, the erratic blue line is satellite observations, and the straight blue line is the smoothed 24-1/4-year trend. Even the lowest simulations are well above observed warming.



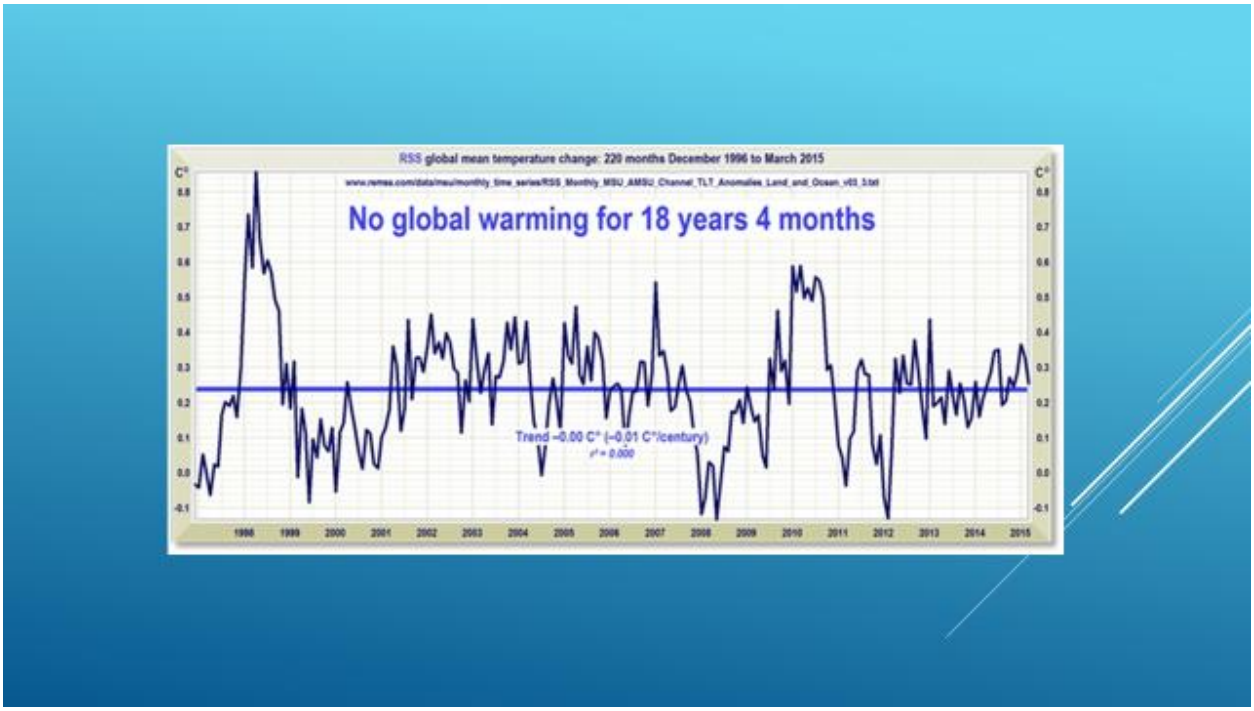
They also simulate, on average, twice as much warming as occurred from 1993 to 2012, and the divergence is even greater for the more recent period 1998 to 2012, as shown in this graph.



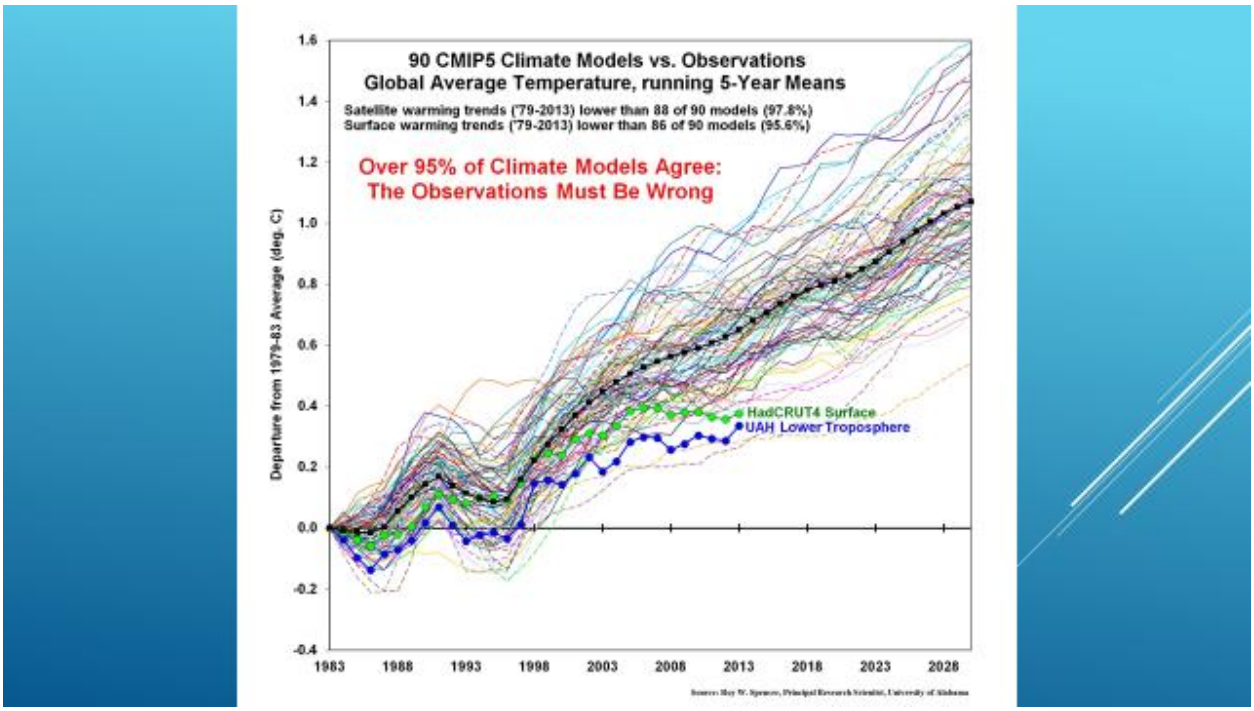
Ironically, IPCC's asserted confidence in the computer models' simulations grows even as their divergence from real-world observation grows, as shown here. The divergence of most models and the model mean is apparent from the early 1980s onward, yet in 1990 IPCC said it was

"confident"; in 1995 it asserted increased confidence, which might have been justified by a few years during which the divergence diminished; in 2001, it claimed it was more than 66% likely that anthropogenic greenhouse gases were the primary cause of the warming, though by then only one model simulation was as low as the observations, and the mean was over three times higher; in 2007 it raised its confidence to over 90%, though not a single model simulated as little warming as observed and the mean was closer to four times the observations; and in 2013 it raised its confidence to over 95%, "extremely likely," though again not a single simulation was as low as the observations and the mean was nearly five times the observations.

Notice a very important thing, by the way. If model simulations' errors were random, they would fall below observations as often as they exceed them. Instead, they <u>always exceed</u> the observations. That is strong evidence of bias.



Second, there has been <u>no</u> global warming now for 18 years 4 months, while atmospheric CO_2 content has risen at an accelerating rate that is now about 2.11 mm per year. Not a single climate model simulates absence of warming for that long a period.



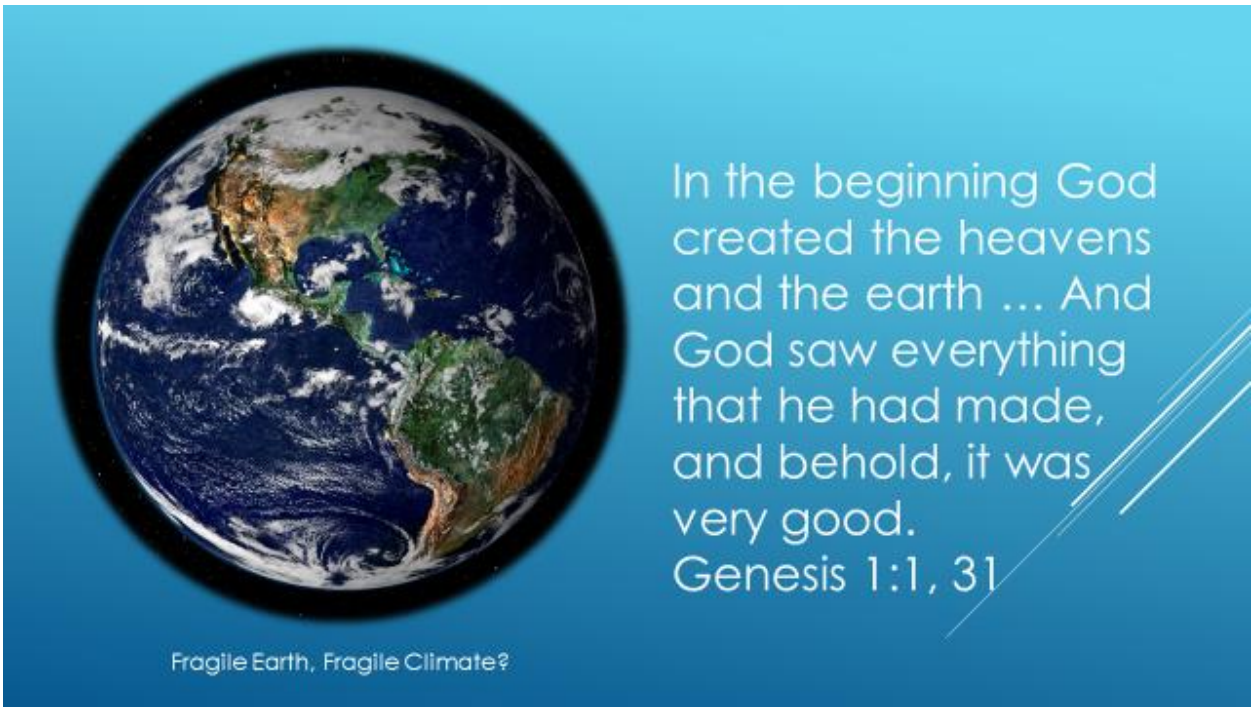
If we think like CAGW believers, we might agree with the red text in this graph. But if we are to think like scientists, we'll remember Feynman's "key to science": "If it disagrees with experiment [i.e., experience, observation] it is wrong."

In response to these observations, many climate scientists have been revising estimates of climate sensitivity. Observational-based rather than model-based estimates have ranges like 0.3 to 1.0 C˚ (NIPCC 2013a, p. 7), or 1.25 to 3.0 C˚ with a best estimate of 1.75 C˚ (Lewis and Crok 2013, p. 9). Further, "No empirical evidence exists to support the assertion that a planetary warming of 2˚C would be net ecologically or economically damaging" (NIPCC 2013a, p. 10).

A Little Theological Input on Climate Sensitivity

Now to integrate a little theology into this discussion of science—something that shouldn't bother anyone who recognizes what historians and philosophers of science commonly recognize, namely, that the Christian worldview that a rational God created an ordered universe to be understood by rational people made in His image is the very foundation of science—let me point something out.

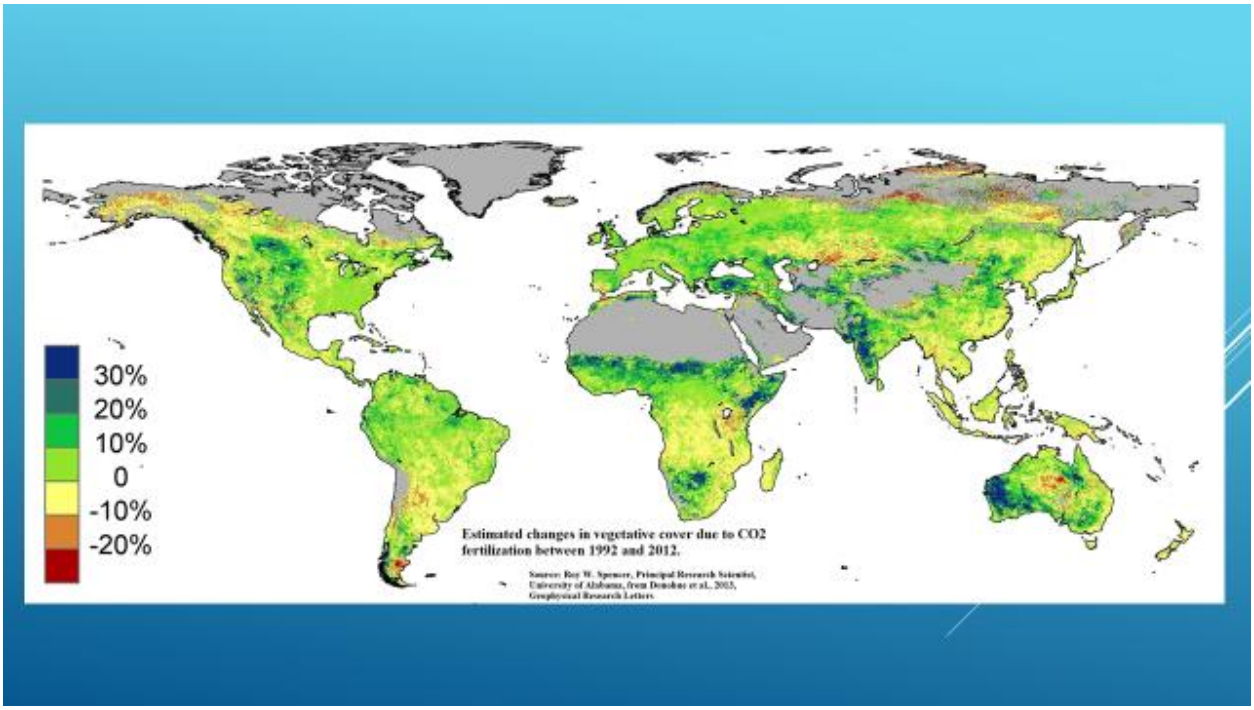
The assumption that positive feedbacks outweigh negative feedbacks in the climate system, especially enough to lead to catastrophe in response to a minute change in atmospheric chemistry (CO_2 concentration rising from 28 thousandths of a percent to 560 thousandths of a percent) leads to the conclusion that the climate system is highly fragile. As we've seen, that's not consistent with observation—i.e., it's unscientific. But it's also not consistent with the Biblical worldview.



Genesis tells us that when "God saw everything that he had made," He found it to be "very good." A climate system that suffers catastrophic collapse in response to a minuscule change in its chemistry is not "very good." (It's also not consistent with what we know about geologic history, which is that CO_2 concentration has been more than ten times what it is now without climate catastrophe's having happened.) Belief in CAGW is much more consistent with belief that the climate system is the result of blind chance over time in a universe without God than with belief that it is the result of infinitely wise design, infinitely powerful creation, and infinitely faithful sustaining—sustaining such as God expressed in Genesis 8:22: "While the earth remains, seedtime and harvest, cold and heat, summer and winter, day and night, shall not cease."

This has had to be a hideously brief look at the science of climate change (including the failed science of CAGW). I haven't touched on claims that the "missing warmth" is hiding in the deep ocean (observations say no), AGW is causing accelerated sea level rise (observations say no), AGW is causing more frequent and extreme severe weather events such as hurricanes, tornados, droughts, floods, and wildfires (observations say no), and various other maladies (observations say no). For further study, I recommend Cornwall Alliance's *A Call to Truth, Prudence, and Protection of the Poor 2014: The Case against Harmful Climate Policies Gets Stronger*, and the voluminous reports of the Nongovernmental International Panel on Climate Change, available at NIPCC.org.

<u>The Economics and Ethics of Climate Policy</u>



Although rising CO_2 concentration doesn't appear to raise global average temperature by much, it does appear to increase vegetation growth.

Satellite photography shows increasing vegetative cover in most areas of the earth from 1992 to 2012 due to enhanced CO_2 fertilization.

For every doubling of CO_2 concentration, there is an average 35% increase in plant growth efficiency.

Plants

- grow better in hotter and colder temperatures and in wetter and drier soil,
- make better use of soil nutrients,
- resist disease and pests better,
- expand their ranges into both higher and lower latitudes and elevations and shrinking deserts, and
- increase their fruitage.

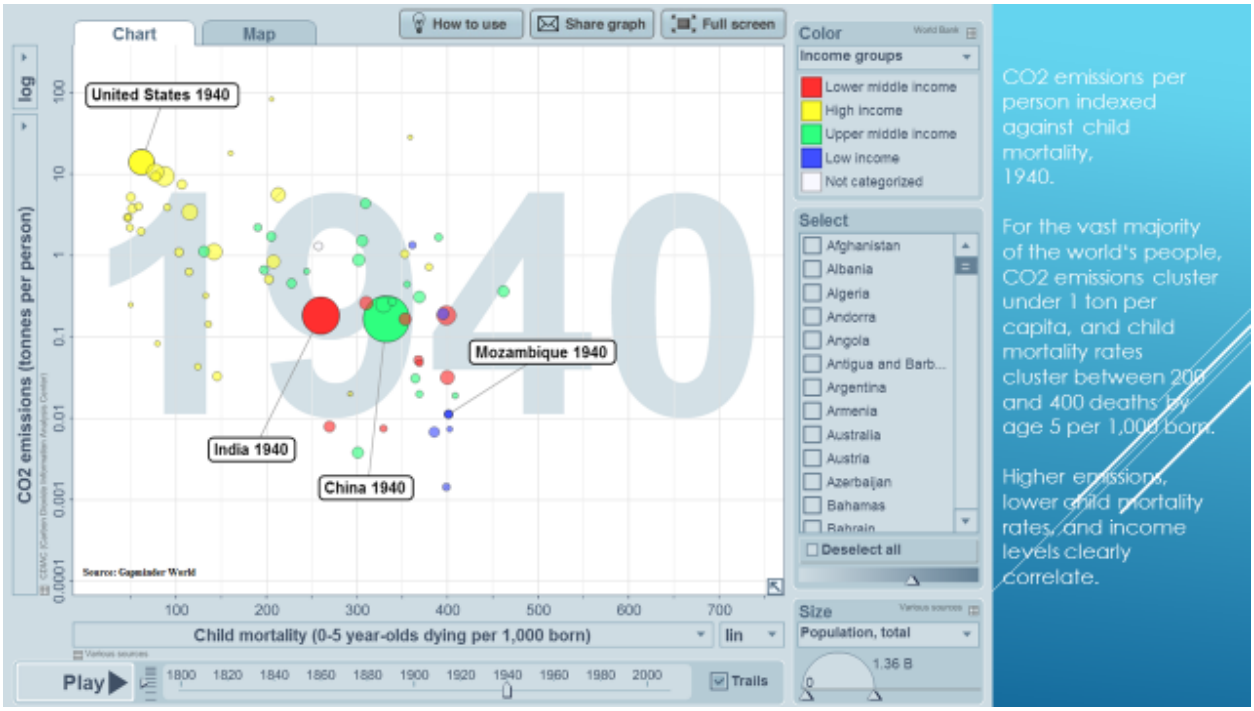
This is a win-win-win situation, since almost all life on earth is either plants, or something that eats plants, or something that eats something that eats plants.

And it's best of all for the poor, because it makes food more abundant and therefore more affordable. A recent survey of hundreds of studies of this phenomenon concluded that anthropogenic CO_2 enhancement alone accounts for about $3.2 trillion worth of crop yields from 1960 to 2012 and can be projected to account for another $9.8 trillion by 2050.

But enhanced plant growth isn't the only, or even the greatest, benefit we receive from using fossil fuels to generate energy and so enhancing atmospheric CO_2. The direct and indirect benefits of the energy are far, far greater.

Estimates vary, but it's safe to estimate that the world currently gets at least 80%, probably closer to 86%, of its energy from fossil fuels. Historical statistics show a clear and strong correlation between energy consumption and wealth, and between wealth, on the one hand, and health and longevity on the other. It follows from the fact that fossil fuel use results in CO_2 emissions that there should be a strong correlation between CO_2 emissions and measures of human health and longevity. Real-world observation confirms that expectation.

Take, for instance, the relationship between CO_2 emissions and child mortality—the number of children who die before their fifth birthday out of every 1,000 born.



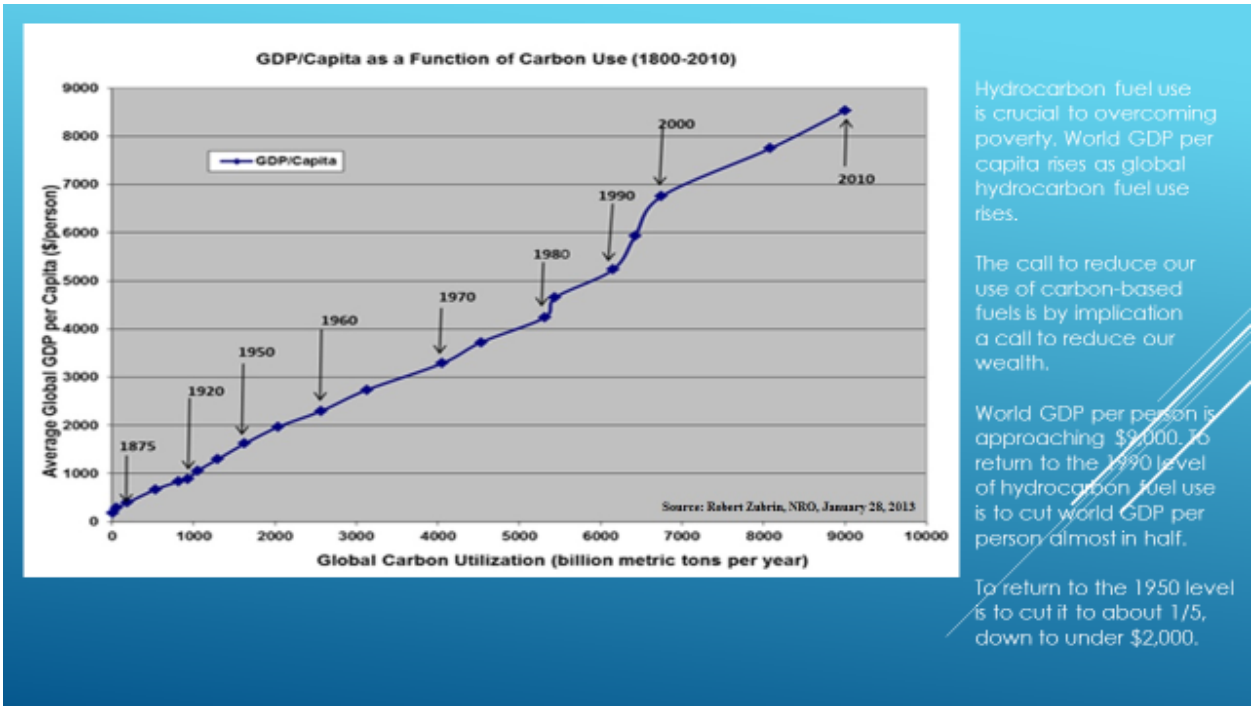
Data from Gapminder World show that in 1940, when for the vast majority of the world's people CO_2 emissions clustered under 1 ton per capita, child mortality rates clustered between 200 and 400 deaths per 1,000 births. Higher emissions, higher incomes (signified by the colors of the circles), and lower child mortality rates correlate positively, and strongly. (Circle size indicates population size by country.)

In 2009, for the vast majority of the world's people, CO_2 emissions clustered between 2 and 10 tons per capita, and child mortality rates clustered between 20 and 60 deaths per 1,000 births. Again, higher emissions, higher income, and lower child mortality rates correlated positively and strongly.

Now consider life expectancy. In 1940, for the vast majority of the world's people, CO_2 emissions clustered under 1 ton per capita, and life expectancy clustered between 25 and 40 years. Higher emissions, higher income, and higher life expectancy correlate positively and strongly.

In 2009, for the vast majority of the world's people, CO_2 emissions clustered between 2 and 10 tons per capita, and life expectancy clustered between 65 and 75 years. Higher emissions, higher income, and higher life expectancy still correlated positively and strongly. The same correlation can be shown for many other measures of human thriving.

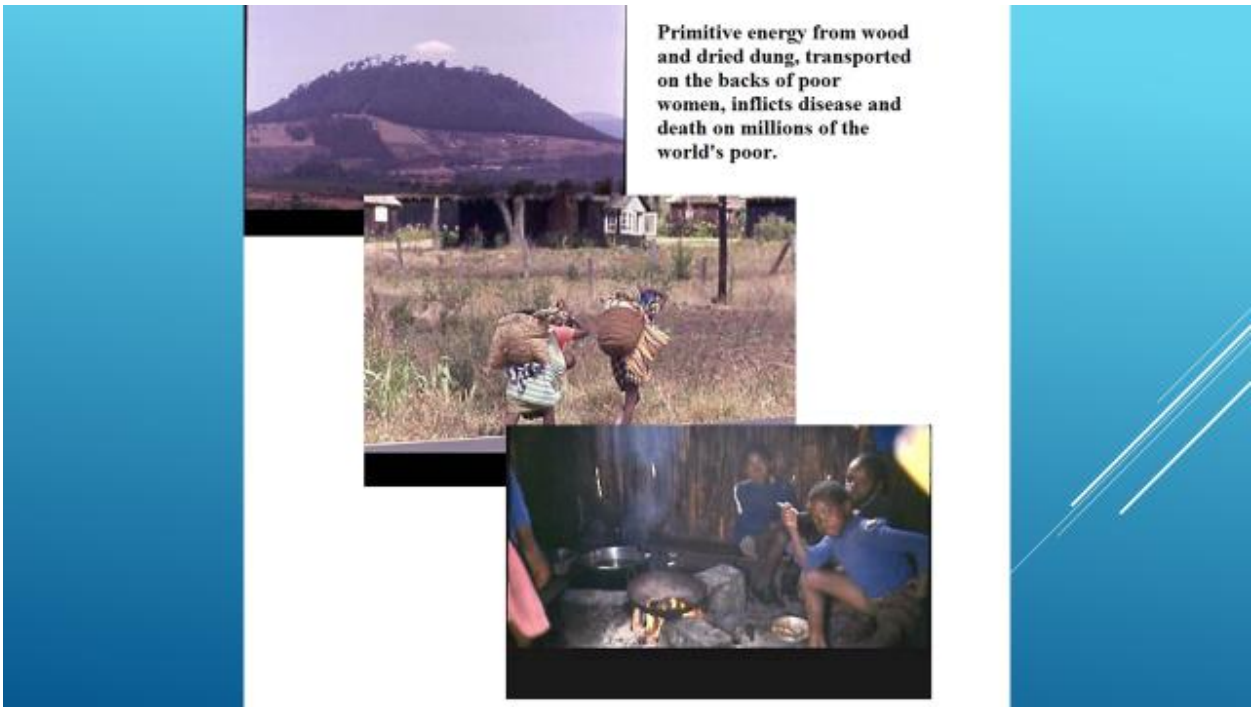
Let's look at the relationship between fossil fuel use and human wellbeing one other way.



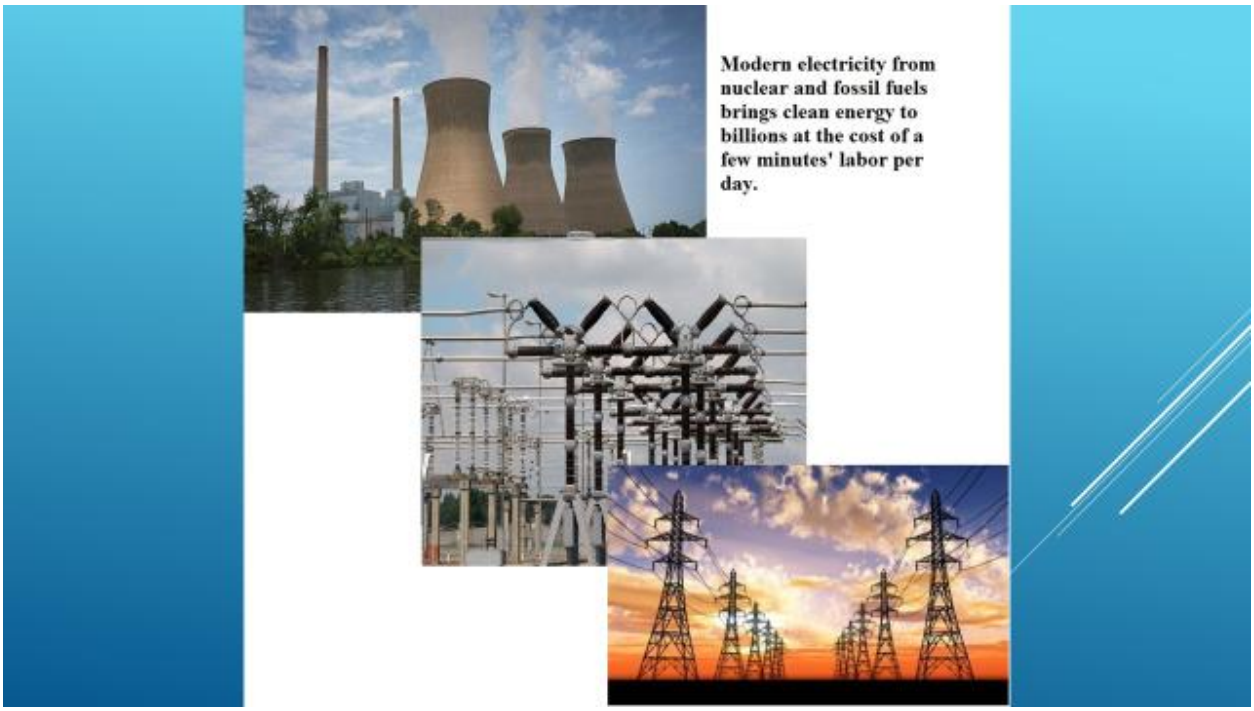
As this graph by Robert Zubrin illustrates, world GDP per capita rises as global hydrocarbon fuel use rises.

The call to reduce any society's use of carbon-based fuels is by implication a call to reduce its wealth.

As of 2010, world GDP per capita was approaching $9,000—about one-fifth what it was in the United States at the time. To return to the 1990 level of hydrocarbon fuel use would be to cut world GDP per capita by about two-fifths of that. To return to the 1970 level would be cut it by about two-thirds.

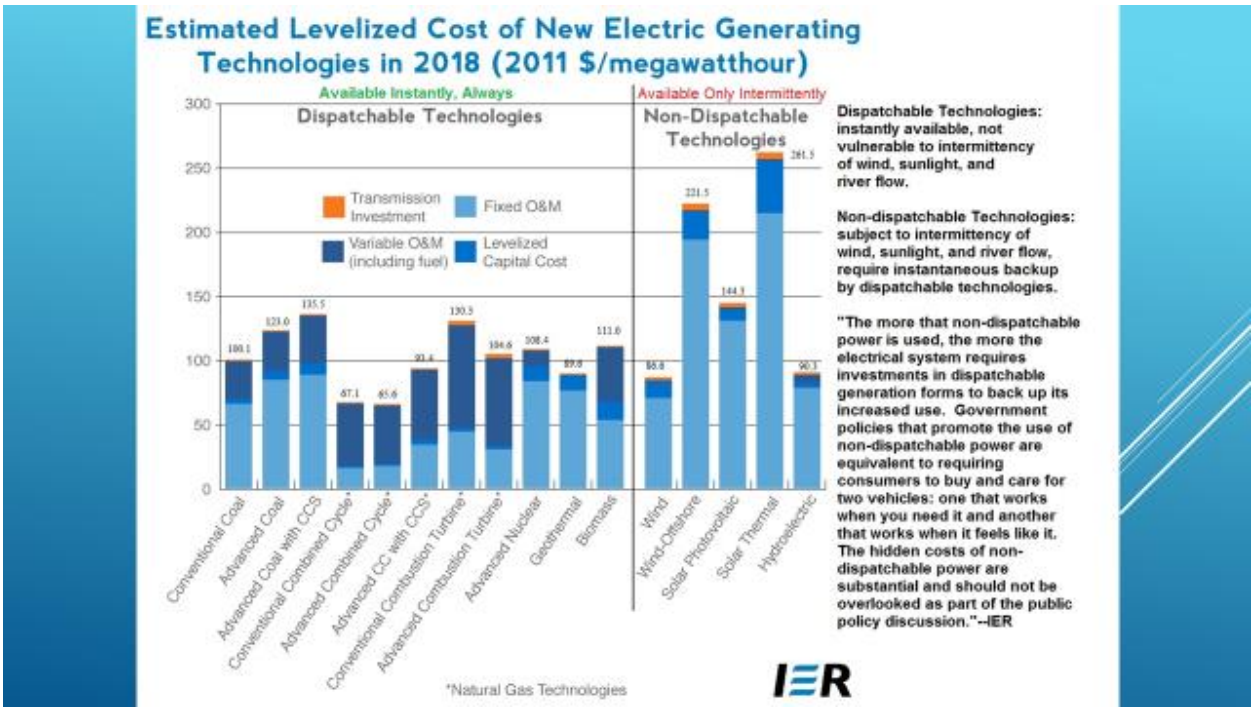


This slide, courtesy of John Christy, illustrates the current energy system in much of the developing world. The average sub-Saharan African woman spends about 6 to 8 hours a day gathering wood and dung for her primary heating and cooking fuels. She carries the fuel home on her back, plasters the dung on the walls of her hut to dry in the sun, and burns the wood and the dried dung on open fires inside or outside her hut. The World Health Organization estimates that smoke from that kills about 4 million people per year, mostly women and children, and infects hundreds of millions annually with respiratory diseases that keep them from lifting themselves out of poverty.



This slide pictures the dominant energy system in the developed world. Fossil fuels, gathered by a comparatively few well-paid people using machines, are brought from mines and wells to generating stations and burned to turn turbines generating electricity that is then transmitted by wires to homes, schools, hospitals, factories, and offices where it is used for cooking, heating, lighting, computing, communicating, transport, medical treatments, and nearly everything else we do, and the average person, unlike the sub-Saharan African woman who spends 6 to 8 hours per day gathering wood and dung, spends only a few minutes per day laboring to pay for that energy and is therefore free for the rest of the day to do other things, including producing goods and services that keep himself and others out of poverty and disease.

The world's poor desperately need to be delivered from that primitive energy system to clean electricity. Restricting global CO_2 emissions enough to make any measurable reduction in global average temperature by the end of this century would require not only greatly reducing emissions in developed countries, and so moving them back toward poverty, but also restricting or prohibiting their growth in developing countries. That means forcing them either to continue with this primitive energy system or to replace it with electricity generated from sources other than fossil fuels. But there's a problem.



The cost of generating electricity from most other sources is significantly higher. The graph here, from the Institute for Energy Research, compares dispatchable technologies for electricity generation with non-dispatchable technologies. Dispatchable technologies are instantly available and not vulnerable to the intermittency of wind, sunlight, and river flow. Non-dispatchable technologies are subject to that intermittency and therefore require instantaneous backup by dispatchable technologies to prevent brownouts, blackouts, and damage to sensitive electronic devices such as computers, telephone systems, hospital equipment, even refrigerator compressors.

At first glance you might think wind, at $86.6 per megawatt/hour generated, is less expensive than conventional coal, at $100.1. But that fails to account for all the time dispatchable technologies have to be kept operating at “spinning reserve” to be ready to replace, instantaneously, any drop in generation from wind, and for all the time the wind isn’t blowing. The same applies in principle to solar.

As the Institute for Energy Research puts it, “The more that non-dispatchable power is used, the more the electrical system requires investments in dispatchable generation forms to back up its increased use. Government policies that promote the use of non-dispatchable power are equivalent to requiring consumers to buy and care for two vehicles: one that works when you need it and another that works when it feels like it. The hidden costs of non-dispatchable power are substantial and should not be overlooked as part of the public policy discussion.”

In the final analysis, the average cost per megawatt/hour of electricity generated from wind and solar runs two to eight times that from fossil fuels.

What does that mean for the world's poor? It means that prohibiting their replacing primitive wood and dried dung with electricity as their main energy sources and requiring them to use wind, solar, and other renewable sources means condemning them to added generations of grinding poverty and the high rates of disease and premature death that invariably accompany it.

That is morally unconscionable.

Preventing that is why I'm here.

I urge you to join me. You can start by signing the Cornwall Alliance's declaration *Protect the Poor: Ten Reasons to Oppose Harmful Climate Change Policies*, which you can find on our website under the "Landmark Documents" tab, and printed copies of which are available here.