

Back in 2006, one of my four brothers, 12 years my elder, had watched Al Gore's documentary, *An Inconvenient Truth* and subsequently brought up of the subject of AGW with me (*anthropogenic (human caused) global warming*) -- which is now generally referred to as climate change. Interestingly, not "ACC". These days one assumes that climate change refers to *human caused* climate change, as if other reasons for climate change didn't exist. After the IPCC (*the U.N. Intergovernmental Panel on Climate Change*) published their 2006 report he touted something to the effect that they were "all but certain" that the (at that time) ca. 0.5 degrees C increase in temperatures from a relatively low period in the mid 70s through 2005 was directly attributable to the increased concentration of in CO₂ in the atmosphere, which was about 60 parts per million. (375-315ppm)

At the time I knew as little about the subject as almost anyone else, but I was reasonably well educated and somehow had earned an A in a statistics class in college. I recall my immediate response to him was to ask if he knew anything about statistical significance. Then I asked him, how scientists could be so sure that the temperature increase from the late 70s to the late 90s was caused by the higher levels of CO₂. Think about it, I said. Literally hundreds of other poorly understood, variables and unpredictable factors also play a role in Earth's chaotic and extremely complex climate system.

Climate is an extremely difficult thing to study because there is no ability to control a study of it, except with computer models. Models however cannot predict future temperatures with any degree of reliability whatsoever. That is a matter of indisputable fact, by the way. The Earth's climate and average temperature is essentially always fluctuating within ranges on short, medium and longer timescales. One data set of only 30 years which reflects an expected return towards the mean temperature, a fluctuation within a known and previously observed range, surely can hold extremely little weight when studying such a system with no control whatsoever, which greatly enhances the need for strong statistical support. When it comes to climate trends 30 years offers essentially little to no statistical significance at all.

Something else I already knew when our debate began was that there was talk back in the chilly 1970s about potentially catastrophic climate change, but the concern was the ongoing cool trend from the mid 1940s through 1978, not warming. In the later 1970s Leonard Nimoy, who played Spock in the original Star Trek, hosted a documentary series called *In Search Of* which became one of my favorite shows to watch when I was about 10 years old. I was already a young Trekkie thanks to another older brother of mine, so seeing Spock as a normal guy was immediately interesting for me and I actually do recall the 1978 episode on the possibility of a new ice age beginning. You can watch it on You Tube: https://www.youtube.com/watch?v=RQRqr9_jw5I It's pretty cool. Even almost chilling at times.

Less than a decade later, in the late 1980s, a new buzz about climate change had already begun. But this time it was about the neither surprising nor unusual warming despite the fact that it was far better news than a continuation or worsening of the cool period of the previous 30 years, not to mention the statistical significance of a 10 year trend being close to zero. Guess who was already getting ready to publish his first book on the subject before the new trend was even a decade old. Al Gore, of course. https://www.washingtonpost.com/wp-dyn/content/article/2007/10/12/AR2007101200827_pf.html By 2006 that buzz had gotten considerably louder, especially after Gore released his documentary, and that despite the fact that temperatures had actually declined after the 1998 super El Nino until the time of its production and subsequent release (2006).

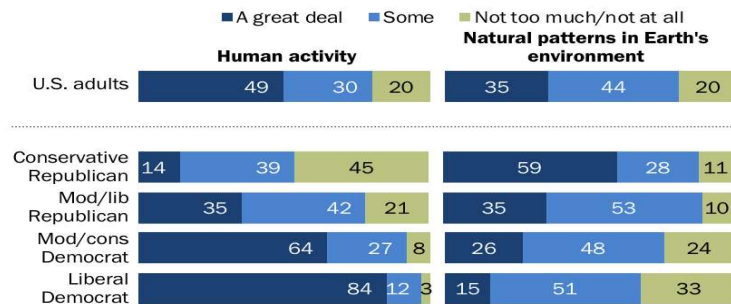
I pointed out to my brother that the temperature records from the 30 year period (1945-1975) which preceded the warming trend (1978-1998) contradicted the hypothesis entirely. Why ignore

the previous 30 years when temperatures had *dropped* from those of the warmer period that had ended in the mid 1940s at which time CO2 levels were rising significantly, likely attributable to the post WWII economic boom. So if the AGW hypothesis was valid, why was the temperature trend from 1945 – 1975 downward instead of upward? From two data sets of 30 years each, the AGW hypothesis was only supported by the empirical evidence in one. I told him that anyone with any common sense and critical thinking skills would find the alarmist claims that additional CO2 in the atmosphere was the cause of the warming between 1978-1998 to be dubious on the face of it. Was it not clearly unscientific to exclude the temperature data from 1945-1975 which would have significantly changed the magnitude and far more dramatically, the rate of change? And thus our on-off, decade-long debate by email began.

Since 2006 I have invested hundreds of hours researching this subject and read about a dozen books on it. This chapter is a summary of the most pertinent and interesting things I've learned about it. This book is obviously not about climate change so the information presented here will not go into significant depth. It is meant to be an introduction and simply to make clear that there are numerous major reasons why this issue is controversial and plays a significant role in the political divide which compromises the prosperity of the United States and its citizens.

More than eight-in-ten liberal Democrats say human activity contributes a great deal to climate change

% of U.S. adults who say each of the following contributes to global climate change ...



Note: Republicans and Democrats include independents and others who "lean" toward the parties. Respondents who gave other responses or who did not give an answer not shown. Source: Survey conducted Oct. 1-13, 2019. "U.S. Public Views on Climate and Energy"

PEW RESEARCH CENTER

The correlation between political affiliation and belief that humanity is to blame for the warming that has occurred over the past 45 years is pronounced, as one can see from this graphic, published by Pew Research in 2019. <https://www.pewresearch.org/science/2019/11/25/u-s-public-views-on-climate-and-energy/>

According to their 2019 survey, 84% of those on the far left of the political spectrum believe that human activity has contributed a "great deal" to the observed warming while only about 14% of conservative Republicans believe this. Likewise, 64% of moderate Democrats vs. just 35% of moderate Republicans believe that human activity is largely to blame for the warmer temperatures since 1978. Is this because conservatives are far more likely to be "science deniers" or gullible enough to believe propaganda and lies, or is it the other way around? Between the two groups, which has been misled while believing that those on the other side are the gullible ones? In my personal opinion, based on over 17 years of reading about the subject from all sides, I am utterly convinced that those who are sceptical about the reporting on the science and supposed consensus that global warming is essentially "our fault" are those who are far better informed about the subject in general.

Clearly I am writing as a journalist. If you don't find my summary to be trustworthy I suggest you conduct your own research instead of simply believing me or headlines and hype going forward. It can be a significant investment in time, which is why so few people even start. Most would start with the Internet as a source, but beware, as left-leaning mainstream media sources tend to dominate Google search results on the subject. To get an idea where most of the big media sources are rated on the political spectrum the go-to source is www.allsides.com/media-bias/media-bias-chart. Be particularly aware of the prominent site on the subject, Skeptical Science, which does a good job of trying to look unbiased but is really only a pro AGW hype site by the Australian blogger John Cook who's bogus survey kicked off the 97% consensus myth in 2013.

For those interested in diving a bit deeper there are many books available by "climate realists" with PhD degrees in science who have been researching the issue for decades. In 2021 Steven Koonin published "Unsettled", which I found to be quite good. I highly recommend taking a few minutes to read the introduction to his book on the "look inside" feature on Amazon. You can also listen to his interview with Joe Rogan on Spotify. It's episode Nr. 1776. That interview was immediately followed by a "rebuttal" by Andrew Dessler of Texas A&M, episode 1777*. **I plan to list a number of moments from that interview where what Dessler says is dubious and explain why at www.thesameboat.com/climate.* I also very highly recommend Robert Carter's "Climate, the Counter Consensus". Also good are "Lukewarmig" by Michaels and Knappenberger, "False Alarm" by Björn Lomborg, "Why Scientists Disagree About Global Warming", Idso, Singer and Carter, "The Real Inconvenient Truth" by Sangster and "Climate Change: The Facts", by Jennifer Marohasy. There are however many, many other books on the subject out there. In fact, between 2007-2010 alone, at least 63 books were published on climate change from the skeptical, realist perspective*. Apparently between 10-20 new ones come out every year! That means there must be hundreds of books out there on the subject, most of which probably never sold more than a couple hundred copies, if that many. The authors of these books are certainly not in it for the money. They invested their time and effort to communicate what they know about this subject out of passion and an interest to inform as many about what they know to be true and false as they can. They are surely highly motivated people who want to help get the word out that not all is as it seems when it comes to media coverage on climate change. They each spent several hundred hours to find a release for their dismay. Sadly almost all of these authors have been unsuccessful in achieving much reach through their personal efforts. **<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3787818/>*

I am a climate realist, although I am quite sure most "climate change alarmists" would label me a "climate change denier" because for them a denier is anyone who sows any doubt about „The Science“* or does not support "immediate and meaningful action" to abet our supposed progression towards climate destruction. But the truth about the real science on the subject simply does not support the alarmist position and is something that you can learn quite a lot about here and many other sources. Call it Lukewarming, as Michaels and Knappenberger chose to in their book by that title. The climate has gotten somewhat warmer, yes, but there is no cause for alarmism. This is where the science leads us, but this fact is being withheld from the court of public opinion because it would destroy alarmists' *raison d'Etre*, and much more. How much is at stake? Reputations, purposes, fortunes, investments, infrastructure, jobs, visions and A LOT of money for a LOT of people. Alarmists however believe that what is really at stake is the future of life on Earth, yet nothing could be further from the truth. No matter what is at stake and what isn't, there is de facto all but no public debate or attention given to the obvious problems and numerous conflicts of interest which encompass this issue in numerous respects.

Skeptics are not fringe "science deniers" nor by any means whatsoever alone, and we certainly do not deserve to be compared to members of the Flat Earth Society as John Kerry had quipped

in 2014. If that is perhaps akin to what you may already be thinking as you consider if you really want to read this chapter or not, then in my humble opinion you may well have the most to gain from reading it if you can maintain an open mind and resist the urge to simply dismiss the points addressed because they conflict with your current opinions and worldview. In this effort I believe a mantra could be helpful. If you notice you're shaking your head or find yourself thinking about writing a one star review for this book on Amazon, then perhaps you may consider running these words through your mind while breathing deeply; Follow the science, not the headlines. Follow the science, not the headlines...and carry on.

The vast majority of Americans agree that we should respect Mother Nature, our paradise-like planet and protect environments from unnecessary pollution and destruction, and I am most certainly one of them! Despite this broad agreement, Americans are nevertheless divided on the subject of (human caused) climate change which has become the signature issue for a new "environmental movement" which unfortunately overshadows all other environmental issues and causes. I feel that any "*guide to heal the divide*" must address this highly controversial subject because it clearly plays a key role in the overall divide in the USA. This chapter will explain why and convince readers that it matters, regardless which side of the argument they're on.

In order to have an informed opinion, obviously one must look at arguments and evidence from both sides of a debate, not just one. This is my presentation on what I have learned from several hundred hours of reading and research, backed up by many scientists, much data and many facts, all of which you can check for yourself.

Most of us have an opinion on whether or not human caused climate change is a serious problem as well as whether or not we should attempt to minimize our influence on the climate system by reducing CO2 emissions as much as possible, as fast as possible. Yet very few of us know much about the controversy at all. This is your opportunity to get up to date on the AGW debate, and it'll only take you about an hour or two to peer inside the rabbit hole. Beware – If you haven't considered yourself to be skeptical about human-caused climate change yet, you likely will by the time you're finished with this chapter. Those who are already skeptical will certainly find more reason to continue to be and also be better informed about the specific arguments against the alarmists' position overall.

First I will briefly cover some necessary and fundamental facts and information about climate science, some data and some terminology. Then I will introduce you to each of the 12 significant issues that raise important, eye-opening questions which are all being relentlessly ignored by the media, many akin to the proverbial elephant in the room. I believe that each of these reasons strongly supports the skeptics' position and that if what I present here became common knowledge there would be considerably less divisiveness in the political arena. I am quite sure you will find it highly educational and often very surprising and in some instances downright shocking.

Please remember that the intention of this chapter is to present and summarize the reasons why Americans are divided on this subject. That is what I do, so please don't take it out on me if this content bothers you in any way. I am just the messenger and I believe this contribution to the debate should be considered constructive. I think it would be a great thing if the points I make were addressed and the questions I ask received answers, although I see that as very unlikely to happen anytime in the near future, at least within the mainstream media. The best strategy for those who benefit from the alarmist narrative being perpetuated is to continue to ignore all these points because there are no strong answers which legitimately "debunk" them. The media will continue to avoid them entirely until we succeed in changing this critical factor of our overall problem -- the politicized misinformation and constant lying-through-omission media.

Without solving the principle issues which are the root cause for the controversy on climate change America's divide cannot be healed because those "issues" are the same reason behind the overall divide at large! In order for us to recognize that we really are all in the same boat and focus together on solving the real problems which have kept and continue to keep America so divided, both sides need to refrain from doing the "labeling without listening" number. Simply claiming that "The Science"* is settled is not going to make the controversy go away because the very last thing that is "settled" is the science about the climate. Again, anyone who believes or purports this claim is either lying or ignorant to "the science" or what science even is and how it works for that matter. The only way this issue is going to be the least bit "settled" is through an open debate in the court of public opinion about what the science *really* tells us.

Essential, basic information on global warming and the affect of CO2 on atmospheric temperature

Let's start off with some of the most basic information regarding the warming of the Earth's climate over the past 115 years, since 1909, when CO2 levels were at 300 ppm and temperatures began to rise from a relatively low level when compared to today and the previous "climate optimum" which was the Medieval Warm Period (WMP, ca. 1000 A.D. - 1300 A.D.) Following the MWP, a cooler period referred to the Little Ice Age (LIA) began around the middle of the 14th century and lasted until temperatures started to rise again, which initially began to occur around 1750. By the 1800s the coldest part of the LIA was more than a century in the past and throughout the 19th century temperatures continued to rise slightly or remain stable at a level that was still several tenths of a degree C cooler than the established baseline. Around 1910 another warming trend began and temperatures rose until about 1945 by roughly 0.5 degrees C. Then they got somewhat cooler again for about 30 years and in the later 1970s started to increase until 1998, the year of the strongest El Nino event on record at that time, which had a marked and lasting effect on global temperatures. After the 1998 peak temperatures stabilized at a relatively high level for roughly 17 years, which became referred to as "the pause". Then another "super" El Nino event occurred in 2015-2016 and the hype about global warming was re-initiated after not having much empirical evidence to report about to support the AGW hypothesis for almost two decades. Currently it is about 0,7 degrees warmer than it was in the 1970s, about 0.5 degrees C as compared to the mid 1940s and a bit more than 1 degree C (almost 2 degrees Fahrenheit) from the low point of 1910. That is how much warming has occurred over the past 115 years. During this time the concentration of CO2 in the atmosphere increased from 300 ppm to the current level of 415 ppm, which is certainly quite a dramatic increase and not a subject of debate.

So what we have observed is apparently a longer trend that began previous to the significant increases in CO2 in the atmosphere which only happened beginning after 1950. Yes, increases in atmospheric CO2 did actually begin after the Industrial Revolution kicked off in the 19th century, but they were minimal compared to the rate after 1950 and in any case were not nearly significant enough in magnitude to have been able to make any measurable difference in atmospheric temperatures, which, by the way, is arguably still the case to the present day, but more on that later.

So it is quite clear and uncontroversial that the upward trend in temperature began at the end of what is known as the Little Ice Age (LIA) around 1750. Whatever initiated the warming trend back in the later half of the 18th century, it was with certainty not increases in CO2 in the atmosphere, and that longer trend has continued right up to the present day. Meanwhile, atmospheric CO2 levels have been increasing at a rate of about 2-3 parts per million annually for the past 70 years, more than likely primarily due to deforestation, which is the very significant removal of an enormous carbon sink, the burning of much of that enormous amount of carbon

and of course the burning of fossil fuels, although there are other natural causes which play a roll as well, primarily the outgassing of CO₂ from oceans as ocean temperatures rise, as they have measurably done over the past 70 years. More on this extremely significant fact later.

Climate change alarmists such as Al Gore purport that this rise in CO₂ and simultaneous temperature increase since 1978 is not simply a coincidental correlation rather that the increases in CO₂ have, according to him, inarguably caused the observed increases in temperatures, ignoring entirely the self evident possibility that the upward trend since the later 1970s is only the continuation of a natural, longer trend that began with the beginning of the end of the LIA roughly 270 years ago, bringing us back towards where temperatures were during the Medieval Warm Period (MWP, ca. 900-1300 A.D.) when crops, life and culture flourished in Europe like they never had previously, giving rise to the period of “rebirth” known of course as The Renaissance.

What is most interesting and obviously flawed about Al Gore's claim is, as mentioned already, that he and others began making it almost immediately after a 30 year-long cooling trend had reversed, which was entirely expected and virtually certain to happen because that is the norm. Temperatures go up and down, all the time, year after year and usually in trends which last 20-30 years, sometimes longer. Before the current warming trend had lasted even a decade however, Mr. Gore and several other men were supposedly certain about its cause. In any case, they were definitely certain about *their* cause. Again, anyone who knows anything about what I've mentioned so far and just a little bit about statistics can see that there could be absolutely *zero* certainty whatsoever what had caused the temperature to begin to go back upward and anyone who claimed that they knew for certain what the cause was, was not someone practising science or statistics rather lying, politics, or both. If there is one thing we can all agree on it's that these two go hand in hand more often than not, unfortunately. That's not controversial, no matter which side of the political fence one happens to be on.

So, when we talk about global warming, its magnitude and rate, it is essential to understand over what period of time one is referring to. If we look, for example, for the overall trend in global temperatures from the MWP to the present we see essentially no warming trend at all. We know this from the ice core data from Greenland, the Antarctic and Russia. So, yes, temperatures have increased about a degree C over the past 115 years, but one must consider that the starting point was well below the average temperature over a longer period of time. The fact that it got warmer over the past 100, or 270 years for that matter, is certainly not a bad thing at all, rather a very fortunate thing indeed. We can and should certainly be very glad about it, yet we're told instead that it is a problem, and that makes literally no sense whatsoever. Why is this the case? I hope to answer that question over the course of this chapter but the short and honest answer is because of politics, propaganda and misinformation. If that statement turns you off, please, continue to read the rest of this chapter so that you can make a more informed decision regarding whether you want to (continue to) believe what Al Gore and many others want you to or if the arguments I address may convince you that climate change “sceptics” are not simply science-denying, nut-job conspiracy theorists, rather persons who generally know a lot more about the subject than the average climate change alarmist does.

But aren't temperatures today warmer than ever before?

We are currently living during what is referred to as an interglacial period. It is called the Holocene, which began at the end of the last glacial period, more commonly referred to as an ice age, about 11,500 years ago. Generally, glacial periods during ice ages last from about 70,000 to 90,000 years and the average interglacial (warmer) periods last about 10,000 years before another glacial (cooler) period begins anew and snow begins to pile up again, which becomes the

dense ice of glaciers that grow to be thousands of feet deep over tens of thousands of years, eventually covering up to about 1/3 of the Earth's surface until the next interglacial period begins and the glaciers commence their gradual recession all over again. This has been the status quo for the past 11,500 years. Did you catch that? According to the law of averages the next glacial period is already overdue by ca. 1,500 years; 15% of the average duration of interglacial periods! And by the way, if you look at the graphs you can easily find in Google images you'll also see that as far as interglacial periods go, the Holocene has been the coolest (out of five) that the Earth has had over the past 450,000 years. So there is literally nothing unprecedented about today's warmer temperatures whatsoever on that relatively long timescale. When it comes to temperatures during the Holocene, the ice core data show that there have been five warm periods over the past ca. 4,000 years. We are, indeed, living in one of them today, thank goodness. The previous warm period was called the Medieval Warm period, previous to that was the Roman Warm Period and previous to that were the Minoan Warm Period and the Egyptian Warm Period, each of which had very similar temperatures to those we have today and were relatively equidistant from one another on the timescale, which strongly indicates that the timing of the modern warm period is in sync with a natural cycle. The geological term for these periods by the way is climate optimum. Yes, it is nice, not problematic, to be living during a climate optimum, and there is nothing whatsoever that is unusual, much less unprecedented about the current temperatures we are experiencing. It may stay warmer for another 10 years or another 100 or 200 years; nobody knows. Only two things are certain in this regard and they are that nobody can predict the near or mid-term future of our planet's climate and that the vast amount of past data clearly indicate that it is not a question of whether another cooling trend and eventually long-term glacial period of 70,000 years or longer will happen or not, rather only *when*.

Climate Sensitivity (to CO₂)

The most elemental thing to understand regarding (supposed) anthropogenic (human-caused) global warming is what is referred to as “climate sensitivity”. Climate sensitivity is the term used for how much the average global (near surface) temperature is expected to rise *per doubling* of the amount of CO₂ in the atmosphere. This value is very hotly disputed and the essence of the entire AGW debate. Scientists do not and cannot know with any real degree of certainty how much increases in CO₂ actually affect the temperature of the atmosphere near the Earth's surface for numerous reasons. Anyone who purports otherwise is either lying or simply ignorant to the facts. Estimates for climate sensitivity range from about 1 degree C on the conservative end to 4, 5 or even as high as 6 degrees on the alarmist end of the spectrum, for which there is absolutely no empirical evidence whatsoever. On the contrary, the temperature and atmospheric data from the ice cores clearly show that atmospheric temperatures are not nearly as sensitive to increases in CO₂ as alarmists purport because we know that in the distant past levels of CO₂ in the atmosphere were only as low as they are now and have been for many thousands of years during ice ages. Climate alarmists such as John Cook, mentioned above as the blogger behind the website Skeptical Science argue that it is not only CO₂ increases which play a role in climate sensitivity (to increases in CO₂), because, as their argument goes, the increase in temperature that said increases cause result in higher evaporation rates, which then increases the amount of water vapour in the atmosphere, and water vapour accounts for something like 80% of the overall greenhouse effect, which then exacerbates the warming. But what Cook and other alarmists do not address is the fact that higher levels of water vapour in the atmosphere also lead to more cloud cover, which reflects more sunlight and infrared radiation and have a marked cooling effect, as we all well know. This is a classic example of lying through omission, which Cook does a lot of on his site.

There is no need to worry about a potential runaway green house effect.

During the Triassic and Jurassic periods, roughly 250 – 150 million years ago, CO₂ levels were between 4 and 7 times higher than they are today. Nevertheless, eventually another ice age began. During the Paleozoic era (541-252 million years ago) CO₂ levels were between 4,000 and 7,000 ppm which is between 10 and almost 20 times higher than they are today, yet despite such high levels of CO₂ in the atmosphere, during the Ordovician age, which was roughly about 450-500 million years ago, a new ice age began when atmospheric CO₂ was still roughly 10 times higher than today's level of roughly 410 ppm. During these times of high CO₂ the Earth's average surface temperature never rose higher than about 22 degrees C. Today the average temperature is roughly 14 degrees C. Another undisputed fact is that in the history of our planet there has never been a runaway greenhouse effect. Not even 20 times as much CO₂ as we currently have in the atmosphere could stall off the next ice age, so we do not have to worry about temperatures going upward in sync with CO₂ levels. That is simply not how it works.

There is only one relative certainty and consensus among scientists when it comes to the magnitude of human-caused global warming, which is simply that it is very likely to be greater than zero. That's it.

So how much *does* CO₂ affect the climate? That's the big question and although hotly disputed, there is a very significant “consensus” on this matter. Have you heard about the 97% consensus regarding global warming? If yes, I would bet that you do not know what that consensus is actually (supposedly) about because essentially nobody does. I will include more about this myth and how this figure came about later, but I can tell you now that if there really were a so-called consensus among unbiased, uncompromised, competent and professional scientists who know the basics regarding the subject matter it would be that CO₂ increases in the atmosphere have some NON-ZERO effect on atmospheric temperatures. That is it. Take 100, 1,000 or 10,000 such scientists and ask them if significant increases in atmospheric CO₂ , (which we undisputedly have had) would likely have some NON-ZERO effect on atmospheric temperatures and I reckon it's likely that 97% of them would say yes, while expressing no opinion whatsoever regarding how significant they believe the potential effect to be at all. If the question however included the words “measurable effect” then the almost unanimous consensus would surely plummet to below 50%. The 97% consensus myth is a product of pure propaganda and a survey for which the word dubious is a gross understatement. After the results of this absurd and unprofessionally executed survey were published in 2013 Barack Obama tweeted on May 16th, 2013: “*Ninety-seven percent of scientists agree: #climate change is real, man-made and dangerous.*” Without the slightest exaggeration this is arguably the most blatant and easily disproven lie ever told or published in writing by any President of the United States. There is not one ounce of validity or truth to that statement whatsoever and even the results of the utterly bogus survey which prompted the Tweet did not support that claim to the slightest degree in the most remote sense. *That* is propaganda and there simply is no argument against that fact at all either. Again, I will go into further detail on the origin of this myth and Obama's tweet as one of the 12 reasons why the climate change issue is controversial later.

CO₂ Affect on AGT Logarithmic, Not Linear

Another very significant fact of the matter regarding climate sensitivity is that the function of CO₂ on atmospheric temperatures is logarithmic, not linear. That is why it is estimated per *doubling* of the amount of CO₂ in the atmosphere. So, if climate sensitivity was e.g. 2 degrees C, per doubling of CO₂, which is a widely accepted if not somewhat conservative estimate, and the amount of CO₂ was e.g. 300 ppm, which was the level of CO₂ in the atmosphere in 1909, then

we would expect to see a 2 degree increase in AGT (average global temperature) when we get to 600 ppm, assuming of course that other factors were not playing greater than usual rolls at that time. We are currently at about 415 ppm and about 1 degree warmer than when the level was 300 ppm, roughly 115 years ago; one down, one to go. CO2 levels are going upward by about 2.5 ppm per year on average. That means it would take another 76 years to get to 600 which will with virtual certainty happen right around the year 2100 or perhaps somewhat sooner. With a climate sensitivity of 2 degrees C and no other factors playing a mitigating or exacerbating roll, we would expect the AGT to be about 1 degree warmer than it is today, and we have 76 years to prepare for that eventuality and the potentially negative consequences that may or may not come with it. And what happens after that? According to the logarithmic function, CO2 levels would have to double *again*, from 600 ppm to 1,200 ppm before we saw another 2 degree increase in AGT. At the current rate of increase that would take an additional 240 years. So with a climate sensitivity of 2 degrees it would take until about middle of the 24th century (2350) to realize a 3 degree C or about 5.5 degrees Fahrenheit increase in AGT. That is roughly how climate sensitivity to CO2 increase functions. This is simply “following the science”.

Diminishing Returns to Increases in CO2

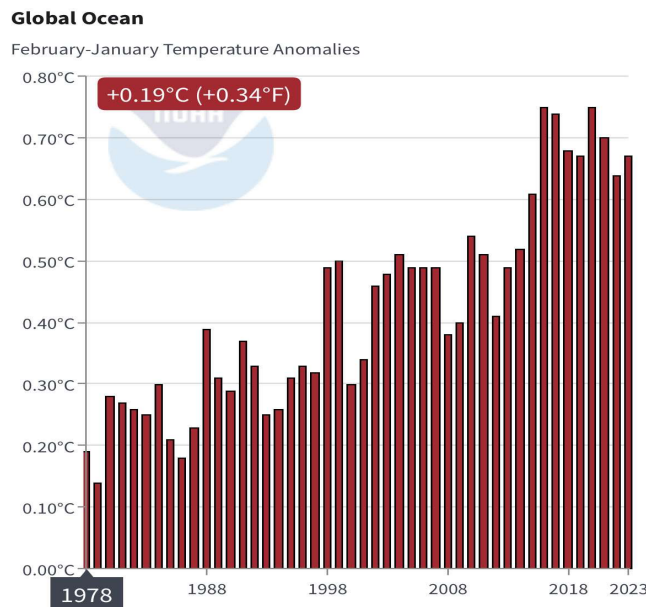
There are significant diminishing returns in AGT as CO2 levels double because the more CO2 there is in the atmosphere the less infrared radiation in the frequencies which CO2 can absorb is available to be absorbed. The technical term for this is saturation. To better understand this principle a simple analogy would be using an increasing number of blankets in order to feel warmer in bed. There is a big difference between no blanket at all and having one. A second can also make a noticeable difference and perhaps even a third as well, but eventually putting on additional blankets makes less and less difference to how warm it is under the first one. If for no other reason, this is why a runaway GHE (green house effect) has never happened on planet Earth and with virtual certainty never will. If anyone would argue, “if it happened on Venus then it could happen here as well”, the simple reply is that the comparison is entirely inappropriate because the percentage of CO2 in the atmosphere on Venus is over 95% while on Earth it is 415 parts per *million*, which is only 0.04%. If we caused a doubling of the current amount *twice*, which would take another 300 years at the current rate of increase, then we would barely be over 1/10th of 1%. Beyond that one must also recognize the simple fact that the primary reason why it's so hot on Venus is because it's much closer to the sun than the Earth and not because it's atmosphere is well over 95% CO2.

The big goal to limit global warming to 2 degrees C between now and the end of this century was declared at the Paris Climate summit in December, 2015. Yet this is essentially a foregone conclusion as there is no reason to believe that the temperature will rise more than 1 degree Celsius between now and the year 2100 unless one assumes that climate sensitivity is greater 3 degrees Celsius, and there is no empirical evidence which supports this assumption. It's nothing more than a guess because the climate system has hundreds of variables and cannot be duplicated and studied in isolation. That's the big problem and the reason why computer models are developed to attempt to, for lack of a better word, model the climate, which has proven to be a task that neither programmers nor super computers are able to master to any reliable degree thus far. Almost every computer model from the late 1990s and early 2000s predicted far more warming by the year 2020 than what actually transpired. Their track record could hardly be more abysmal, which is another incontrovertible matter of fact. If climate sensitivity is less than 3 degrees C there would be no reason to expect the AGT in 2100 to be more than 2 degrees higher than what we are experiencing today, and a climate sensitivity of 3 degrees is not considered a conservative estimate, so we are very likely to achieve that goal *with or without* any mitigation of CO2 output. Again, if climate sensitivity is 2 degrees, temperatures should only rise another 1 degree C by the end of the century, again, the combined effect of all other factors on AGT

remaining more or less within the average.

So, if it isn't increases in CO2 that have caused the temperatures to increase, what has?

This question leads us straight to the heart of the matter and in answering it we can speak directly to the elephant in the room that all climate change alarmists and the mainstream media ignore entirely. Are you ready? It's been the rise in ocean temperatures, measured and documented by NOAA, the National Oceanic and Atmospheric Administration, which is a branch of NASA. According to NOAA, the authority when it comes to the very best data available, the near surface ocean temperatures have risen by 8/10ths of a degree Celsius per decade since the 1970s. Correspondingly, the atmospheric temperatures have also risen in close synchronicity. And what have the biased mainstream media sources tried to do with this fact? They've reported that global warming is worse than we thought because the oceans have supposedly absorbed 90% of the warming which we (supposedly) caused in the atmosphere and without them having done so we would essentially be living in a sauna. No joke. It's crazy, but you can search for such articles online yourself. This is pure propaganda and it just fuels the fears of the ignorant and gullible people who don't think far enough to even ask the question how that could possibly happen. If this were true then the figure for climate sensitivity would be *far beyond* the highest estimate by the Intergovernmental Panel on Climate Change (IPCC) which is the biggest source of this entire dubious controversy in the first place!



Source: <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/global/time-series/globe/ocean/12/1/1978-2023>

Think about it yourself. If the atmosphere was e.g. half a degree warmer due to an increased greenhouse effect, how is that additional energy going to get into the ocean? It could only happen through conduction at the surface where the ocean and the atmosphere meet, right? Of course. Now imagine that the sea surface temperatures which NOAA measures encompass the top 100 meters, which is 100,000 millimeters. So these unscrupulous and unprofessional media sources are literally trying to make us believe that supposed conduction of warmer air at the top mm is being absorbed and passed down to a depth which is 100,000 times greater than the one and only mm where conduction can happen. Come on man! Seriously?? Ask any high school chemistry teacher to explain to you if that is possible or not and they'll tell you straight up, of course not. If you believe that this is possible then you might as well try to warm up the water in your bathtub by turning the heat up in your bathroom. Good luck with that. On the other

hand, if the temperature in your bathroom is e.g. 70 degrees F. and your bathwater is e.g. 75 degrees, come back and check the room temperature an hour later. It won't be 70 degrees any more, rather higher, for certain. This is THE elephant in the room that virtually nobody is talking about and it is absolutely the smoking gun that destroys the alarmist belief that the culprit behind global warming is the copious amount of CO₂ we are putting out into the atmosphere because we prefer our houses warm, love using things that consume / require electricity such as lights, computers, televisions, stoves, ovens, cell phones, etc. and because we'd rather drive from place to place than walk, bike or use mass transit. Meanwhile, by the way, essentially none of these climate change alarmists have decided to make the personal sacrifice to give up any of these things in order to try to help "save the planet". The fact of the matter is that the biggest proponents of the alarmist "cause célèbre" such as Al Gore and e.g. Leonard DiCaprio have personal carbon footprints many, many times greater than the average global citizen as well as the average American while they fly around on private jets to climate conferences and DiCaprio entertains other celebrities who use their private jets and helicopters to visit him on his enormous diesel-guzzling yacht. The hypocrisy is nauseating.

The phenomena known as ENSO (El Niño) happens roughly every seven years on average, at which time warmer water rises to the surface in the southern Pacific. Invariably, in the same year this natural current / oscillation occurs we experience warmer temperatures in the atmosphere, the most recent examples of which were the unusually strong El Niño events of 2015-2016 and 1998, each of which caused new peaks in atmospheric temperatures which we haven't seen for many decades if not quite possibly centuries. So what I am saying here is not a matter of dispute. Warmer ocean water indisputably leads with virtually zero lag to higher atmospheric temperatures. Ergo, it must be obvious to anyone who is not suffering from an inordinate degree of cognitive dissonance that the warmer SST (sea surface temperatures) as documented by NOAA are the obvious culprit for the warming we have realized on the surface. Again, clearly it absolutely cannot be the other way around, which would be that the atmosphere warmed first due to a higher greenhouse effect due to additional CO₂ and then the ocean got warmer, with little to no lag whatsoever. The notion is ludicrous. It is a physical impossibility as not just any high school chemistry teacher would testify rather also any high school chemistry student who actually was paying attention when his or her teacher taught them about the (high) specific heat of water.

There is a video of Al Gore on YouTube shamelessly lying about this very subject. Check it out. <https://youtu.be/B8-skqC70bE> or simply search Al Gore Presents Climate Crises Slideshow by *Now This News*. The cover image has Gore left of the text: Al Gore Explains the Climate Crises. Duration 1:17:47. Beginning at 6:30 Gore states, "93% of the heat trapped by the greenhouse gases is going into the ocean, and of course, as a result, the ocean temperature is going up quite dramatically." Then he even goes on to make himself sound an order of magnitude more absurd than he would if he had only claimed that the SST (top 100 meters) were rising when he goes so far as to state that the heat is penetrating down to depths of 2000 meters(!), at 6:48. Absolutely incredible! The ignorance and / or audacity could hardly be more astounding, really.

Now you can watch this and believe that Al Gore has got it right and 93% of the warming that we have supposedly caused by increasing the level of CO₂ in the atmosphere has caused the ocean temperatures to increase and indeed, all the way down to depths of over 6500 feet, or you can instead believe the indisputable scientific fact I just made clear above which is that what he clearly states in this section of this video is a physical impossibility, which any competent scientists will assure you it is. But you certainly don't have to take my word for it. If you don't know what to believe, then ask a chemist or a physicist and see what they tell you. As far as searching for information on this online however, I must say that it is nothing short of astounding how difficult it is to find any videos on YouTube, for example, sharing with you what I just did

here, especially since it is, as stated, the smoking gun which utterly destroys the AGW argument, Al Gore's credibility and is without a doubt, THE elephant in the room.

The REAL Inconvenient Truth about Al Gore's Mock Documentary

Going back almost 20 years, Al Gore came out with his “documentary” in 2006 about supposed imminent and extreme global warming which was supposedly indisputably happening and about to get much worse beginning immediately. This horrendous propaganda film was akin to a really, really bad joke, yet won the Oscar for best documentary.

This (mock) documentary is chock full of multiple fear-mongering brief clips of extreme weather events, blatant misrepresentations, unrealistic exaggerations, false assumptions and doomsday / worst case scenario predictions. The major part of this movie however is Gore using a Power Point presentation of the entirely discredited “Hockey Stick Graph” (HSG) from Michael Mann of the University of Pennsylvania, et. al. There is a book called A Disgrace to the Profession by Mark Steyn which outlines the multiple problems with Mann's graph in the words of over 200 different scientists, all of whom know far more about climate science and science in general than Al Gore ever will. But that is actually relatively unimportant compared to what I am about to share with you.

Gore's presentation has the HSG projected on an enormous screen, and it shows temperature and atmospheric CO₂ data from ice cores which are a reliable proxy to find out what the local temperature and CO₂ content of the air were at any point going back 650,000 years. The CO₂ content can be measured accurately from air bubbles in the ice and temperature is determined through oxygen isotopes. This is actually accepted as very solid science, so no problem with that.

Gore discusses the correlation between the rise of fall of temperatures over the 650 millennia and CO₂ levels, but also at some point tells a story of how he and several fellow pupils in grammar school were looking at a globe together when a boy named Johnny had commented that Africa and South America seem like they could fit together like puzzle pieces. He then quips to his audience that he and his friends had quasi rolled their eyes because Johnny had stated something that they had supposedly learned long before that moment and that Johnny wasn't “the sharpest tool in the shed”. He later refers back to this seed he's planted to lead his audience to feel they would be (have to be) “dumb” (like Johnny) to not come to the (same, false) conclusion that he wants them to buy into / believe at the end of his presentation.

As mentioned previously, it is not a matter of dispute that CO₂ levels have risen sharply over the past 100 years. We have seen more than a 50% increase in atmospheric CO₂ in the past century. Compared to the rise and fall over the past 650,000 years, the rise of over 100 ppm in just 100 years elicits an almost vertical line on the HSG. This is the blade of the hockey stick which is why the graph was given this name. This increase and representation on the graph are also not matters of dispute. To dramatize / emphasize the rate and magnitude of this increase, Gore uses a pneumatic cherry picker to lift himself up to the upper right hand side of the graph so that he can physically point to the top of it. Then he leads his audience into the false conclusion that he wants them to believe by asking them in a facetious tone, “what do you think is going to happen next when it comes to temperatures?, implying that the correlation between CO₂ and Temperature which he had just emphasized a moment earlier indicated that the temperature would surely also go practically vertical, in sync with the dramatic rise in CO, at which point Gore refers back to the supposed dimwit Johnny stating that even he would likely be able to put two and two together on this one, which was to say, if you don't think the way Gore wants you to think, you must be a dimwit. If that's not manipulating your audience I don't know what is.

The incredible thing which is an undisputed fact about this entire presentation and it's utterly false conclusion is that, although CO2 levels and average global temperatures are indeed strongly correlated, it is temperature which goes up *first* and *leads* increases in CO2, by approximately 800 years, and this is actually a causal relationship. What happens is that after something triggers increases in global temperature, usually Milankovic cycles, which are irregularities in the Earth's orbit, discovered by and named after the Croatian scientist Milutin Milanković (1879-1958). When the Earth is closer than usual to the sun or the tilt of its axis changes angle, the planet warms up in one or both hemispheres. This is how and why ice ages come to an end. Conversely, it is how they begin, depending obviously on what alteration to the orbit occurs. After 800 years of a warmer climate, ocean temperatures eventually begin to rise as well. Then, due to the reduced solubility of CO2 in solution with higher temperatures, there is eventually an enormous outgassing of CO2 from the oceans which they had previously absorbed, which leads to rapid increases in atmospheric CO2. Alarmists such as John Cook (Skeptical Science) acknowledge this fact but say that the subsequent increases in CO2 exacerbate the warming that had already been going on for some 800 years. This is clearly unscientific because although it may be true to some degree, it is impossible to quantify how much warming in an existing warm trend is due to additional CO2 after their level begins to rise some 800 years after the trend began and how much is still being caused or sustained by the initial forcing factor.

So it is not a matter of dispute at all that Al Gore absolutely withheld these facts from his audience and led (most of) them to believe that there was not only a correlation between CO2 levels in the atmosphere and temperature but also that CO2 levels were what *caused* temperatures to increase, which is absolutely 180 degrees flipped around. It is clearly higher temperatures which occur first and subsequently cause the levels of CO2 to increase, **not** the other way around. And for this gross misrepresentation of the data Al Gore won a Nobel Prize and An Inconvenient Truth won the Oscar at the Academy Awards for best documentary. Absolutely incredible. So why does nobody in the mainstream media expose this truth and ask Al Gore if he *knew* that he had gotten it all wrong and put him under the spotlight to either throw Michael Mann under the bus or admit that he had knowingly withheld and misrepresented information from his audience? Because if that happened the entire alarmist case would collapse and there is simply too much money and political capital at stake to allow that to happen, that's why.