Our Weekly Paid Newsletter

Richard Cluver Predicts

In our 34th year of service to the investing public of South Africa

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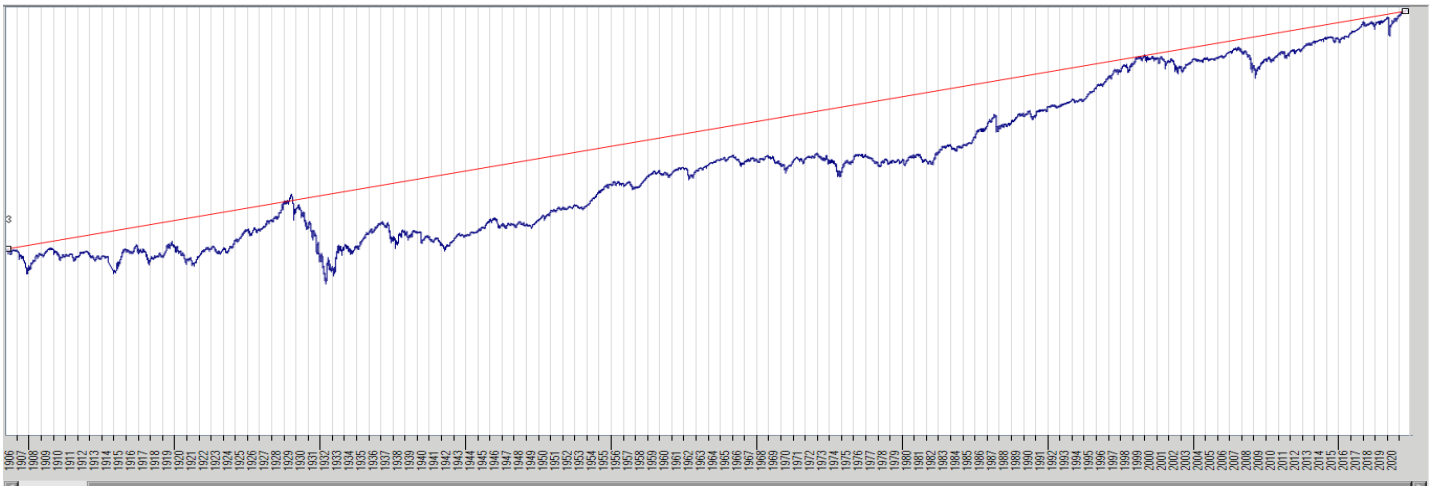
As I write it is the 11th minute of the 11th hour of the 11th day of the 11th month as all over the world people who remember the horrors of war pause to honour all those who gave their lives so that you and I are free to live ours.

My wife Liz and I were present this year, as every year, at Highbury School in Hillcrest, KZN, to listen to small boys paying tribute to their 52 old boys who gave their lives in two world wars and the South African War. Given that in 1913 the tiny country school boasted an enrolment of just 62 boys, the fact that 26 were to die in the First World War provides some perspective upon the magnitude of the impact of that war upon the young colony of Natal at that time. By 1919 the school register listed 52 boarders and 37 day scholars which implies that nearly a third of the Old Boys died in Flanders Fields

In the Highbury chapel there is a bronze plaque recording the names of the men who died and, reading through them I was struck by how many bore the names of families who were friends of my parents. I was furthermore struck by the fact that several families had faced the tragedy of giving more than one son. How, I wonder, did the tiny colony of Natal manage to contain such grief?

Highbury is one of the dwindling number of schools in South Africa which draw immense strength from their traditions, subscribing to the belief that those who forget the past face the danger of losing the future. That is why it so diligently conducts a Remembrance Day service every year and why I, each year, give thanks that the few Old Boys who attend it wearing military uniform are the only soldiers those small boys are ever likely to encounter in their daily lives.....because of the service those men rendered for their country.

I mention all of these things because in the graph below I have reproduced 121 years of stock exchange history as recorded by the world's oldest index of value, the venerable Dow Jones Industrial Index which, if you cared to measure that red trend line, tells the important story that one US$ invested in June 1900 would have grown every year by 3.4 percent. Putting that into actual numbers, on June 22 1900 when the index was launched its opening value was 54.110 and today it stood at 19 898.919. That is, notwithstanding a series of gyrations during that time like the Black Tuesday event of 1929 which launched the Great Depression, offering constant gains for those who stood firm throughout, refusing to panic when short-term trends went against them.



What you can take from it is the stark reality that history repeats itself with an 84 percent probability!

The graph appears in logarithmic scale which implies that the gyrations are represented by their percentage movement which makes historic comparison possible. Thus it is easy to see that the 1929 event was the worst of them all. But one can also plainly see the 1999 to 2000 'Dot Com Bubble' burst, the 2007-9 'Sub Prime' crisis and the 2020 'Covid Catastrophe.'

Now, using artificial intelligence, the ShareFinder software is able to measure a series of recurrent sine waves in this 121-year set of data and by employing the power of exponentiation which gives logarithmic progressive weighting to the latest data movements, is thus able to project the likely future trends of markets and equally of individual shares. The accuracy of these forecasts is, furthermore, demonstrated by the accuracy record which I have posted at the end of this column every Friday since January 2002. We are thus fast approaching the 20-year anniversary of that first set of predictions and so I am proud to be able to record that our running accuracy record overall is now 86.42 percent.

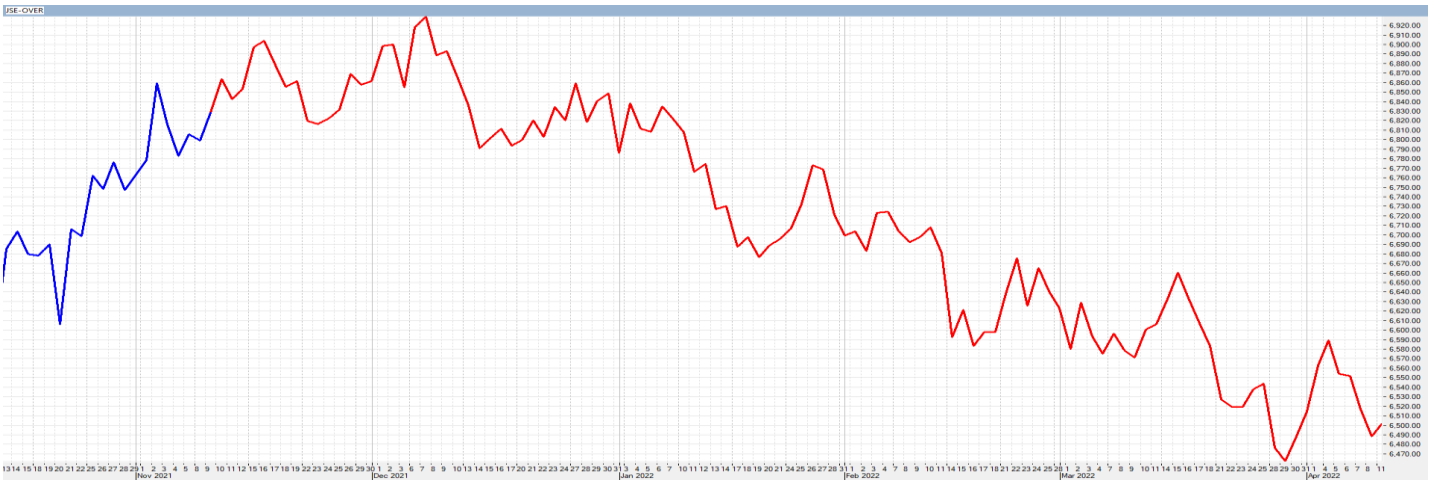
Some 13 years ago when I was writing my book 'The Simple Secrets of Stock Exchange Success' I noted that it appeared impossible to break above a forecast average accuracy record of 82 percent. That we have since been able to increase that to 86.43 might appear a minimal increment to most people but it is in fact a tribute to machine learning; the fact that computers can be taught to learn from their errors and accordingly tweak their algorithms towards improvement.

I doubt that ShareFinder could ever achieve 100 percent forecast accuracy and it is thus very important to bear in mind that ONLY four out of five of the predictions the programme makes can be relied upon. That is incredibly good within the investment industry but you certainly should never bet your shirt on them.

Now, given the huge amount of data the Dow Industrial gives us, the following projection is thus the most accurate that ShareFinder is able to offer.

Here I should note that when, in September 2019, I published my book 'The Crash of 2020' ShareFinder was projecting a minor collapse of the JSE starting in February 2020 followed by a major collapse beginning on October 14. And of course, as we all know, it happened the other way around. The minor collapse happened exactly when ShareFinder had forecast it but it soon turned into a 33.7 percent rout so severe that the subsequent ten percent decline of the Dow that did begin on October 14 – together with the same ten percent decline which began a little earlier on the JSE - were actually completely eclipsed.

The big lesson to learn from all of this is that when share markets become overheated and students of economics like myself are warning of dangers ahead, it is extremely important to act early and cash in your weakest-performing holdings so that you will have the ammunition available to be able to pick up bargains when the event actually happens. Nobody, and I stress NOBODY is able to warn you with complete accuracy when a crash will happen. That's why it is good to act early even though you might miss out on a few gains. So don't be greedy! For the record, however, ShareFinder currently projects a local market decline beginning on December 8. Here is the graph:



That is why I have been creating cash in my own portfolio at a time when markets are still climbing strongly!

Watch this space and do enjoy your weekend!

The month ahead:

New York's SP500: I correctly predicted a brief retraction which I now see lasting until December 20 ahead of further gains until February 16 ahead of another retraction until the end of March.

Nasdaq: I correctly predicted a brief retraction which is likely to over next week ahead of an upward sweep until mid-April.

London's Footsie: I correctly predicted the end of the last brief recovery and now expect a volatile declining trend lasting until next August. However I still expect one more brief up-spike beginning around the 15th.

Germany's Dax: I correctly predicted brief gains which I expected would continue until today. Now it is likely to be down again until early May.

France's Cac 40: I correctly predicted a mid-month spike down until the first week of January. Thereafter it is likely to be a yo-yo for most of the coming year.

Hong Kong's Hangsen: I correctly predicted a volatile decline until mid November then up to mid-December and down once more to mid-January before a protracted recovery begins.

Japan's Nikkei: I predicted a decline would begin last week but I still expect it and that it will last until late April. I failed, however, to anticipate the gain since October 11.

Australia's All Ordinaries: I correctly predicted the start of a three-month recovery which I expect to last until mid-December. Thereafter I see it bumping along the top until mid-March before the next long decline sets in until at least next October.

JSE Top 40 Index: I correctly predicted the recovery was probably now over ahead of weakness until mid-February when a longish rally appears likely.

ShareFinder JSE Blue Chip Index: I correctly predicted the current short-term up-phase which should last until the second week of December ahead of declines until mid-May.

Rand/Dollar: I correctly predicted weakness until the end of January followed by a recovery until June.

Rand/Euro: I correctly predicted weakness until early March.

The Predicts accuracy rate on a running average basis since January 2001 has been 86.43 percent. For the past 12 months it has been 93.49 percent.

I published the Green view last week. Here is the alternative!

GreenMageddon and What It Means for You

by David Stockman

With COP26 now underway, it's not too soon to start clanging the alarm bells—not about climate catastrophe, of course, but about the stupidest act of the assembled nations since Versailles, when the vindictive WWI victors laid the groundwork for the catastrophes of depression, WWII, the Holocaust, Soviet tyranny, the Cold War and Washington's destructive global hegemony, all of which followed hard upon the next.

Politicians and their allies in the mainstream media, think tanks, lobbies and Big Business (with its cowardly sleep-walking leaders) are fixing to do nothing less than destroy the prosperity of the world and send global life careening into a modern economic Dark Ages. And worse still, it's being done in the service of a bogus climate crisis narrative that is thoroughly anti-science and wholly inconsistent with the actual climate and CO2 history of the planet.

Cutting to the chase, during the past 600 million years, the earth has rarely been as *cool* as at present, and almost never has it had as *low* CO2 concentrations as the 420 ppm level that today's climate howlers decry.

In fact, according to the careful reconstructions of actual earth scientists who have studied ocean sediments, ice cores and the like, there have been only two periods encompassing about 75 million years (13% of that immensely long 600 million year stretch of time) where temperatures and CO2 concentrations were as low as at present. These were the Late Carboniferous/Early Permian time from 315 to 270 million years ago and the Quaternary Period, which hosted modern man 2.6 million years ago.

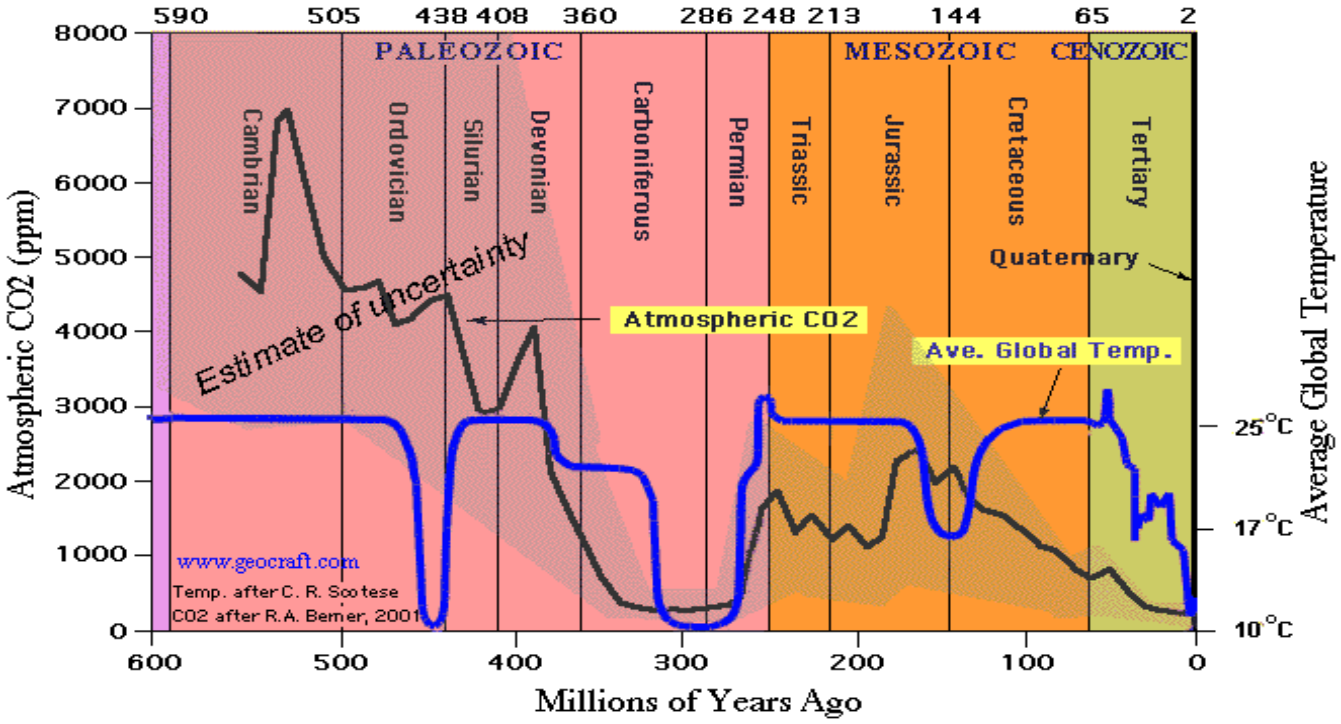
You might say, therefore, that the possibility of a warmer, CO2-richer environment is a case of planetary "been there, done that". And it is most certainly not a reason to wantonly dismantle and destroy the intricate, low-cost energy system that is the root source of today's unprecedented prosperity and human escape from poverty and want.

But that's hardly the half of it. What actually lies smack in the center of our warmer past is a 220-million-year interval from 250 million years ago through the re-icing of Antarctica about 33 million years ago that was mainly ice-free.

As shown by the blue line in the chart below, during most of that period (highlighted in the brown panels), temperatures were up to *12C higher* than at present, and Mother Earth paid no mind to the fact that she

lacked polar ice caps or suitable habitats for yet un-evolved polar bears.

Global Temperature And Atmospheric CO2 Over Geologic Time



As it happened, during what has been designated as the Mesozoic Age, the planet was busy with another great task, namely, salting away the vast deposits of coal, oil and gas that power the modern economy and allow billions of people to have a living standard enjoyed only by kings just a few centuries ago.

There is no mystery as to how this serendipitous gift to present-day man happened. In a world largely bereft of ice and snow, the oceans were at vastly higher levels and flooded much of the landmass, which, in turn, was verdant with plant and animal life owing to warmer temperatures and abundant rainfall.

Stated differently, Mother Nature was harvesting massive amounts of solar energy in the form of carbon-based plant and animal life, which, over the eons of growth and decay, resulted in the build-up of vast sedimentary basins. As the tectonic plates shifted (i.e., the single continent of Pangaea broke up into its modern continental plates) and the climates oscillated, these sedimentary deposits were buried under shallow oceans and, with the passage of time, heat and pressure, were converted into the hydrocarbon deposits that dot the first 50,000 feet (at least) of the earth's crust.

In the case of coal, the most favorable conditions for its formation occurred 360 million to 290 million years ago during the Carboniferous ("coal-bearing") Period. However, lesser amounts continued to form in some parts of the Earth during subsequent times, in particular, the Permian (290 million to 250 million years ago) and throughout the Mesozoic Era (250 million to 66 million years ago).

Likewise, the formation of petroleum deposits began in warm shallow oceans, where dead organic matter fell to the ocean floors. These *zooplankton (*animals*)* and *phytoplankton (*plants) mixed with inorganic material that entered the oceans by rivers. It was these sediments on the ocean floors that then formed oil sands while buried during eons of heat and pressure. That is to say, the energy embodied in petroleum initially came from the sunlight, which had become trapped in chemical form in dead plankton.

Moreover, the science behind this isn't a matter of academic armchair speculation for the simple reason that it has been powerfully validated in the commercial marketplace. That is, trillions of dollars have been deployed in the last century in the search for hydrocarbons, based on immensely complicated petroleum engineering

research, theory and geologic models. Oil drillers weren't throwing darts at a wildcatter's wall but were coincidentally proving these "facts" of climate history are correct, given that they led to the discovery and extraction of several trillions of BOEs (barrels of oil equivalent).

Consequently, it is solidly estimated by industry experts that today's petroleum deposits were roughly formed as follows:

About 70% during the Mesozoic age (brown panels, 252 to 66 million years ago) which was marked by a tropical climate, with large amounts of plankton in the oceans;

20% was formed in the dryer, colder Cenozoic age (last 65 million years);

10% were formed in the earlier warmer Paleozoic age (541 to 252 million years ago).

Indeed, at the end of the day, petroleum engineering is rooted in climate science because it was climate itself that produced those economically valuable deposits.

And a pretty awesome science it is. After all, billions of dollars have been pushed down the wellbores in up to two miles of ocean waters and 40,000 feet below the surface in what amounts to an amazingly calibrated and targeted search for oil-bearing needles in a geologic haystack.

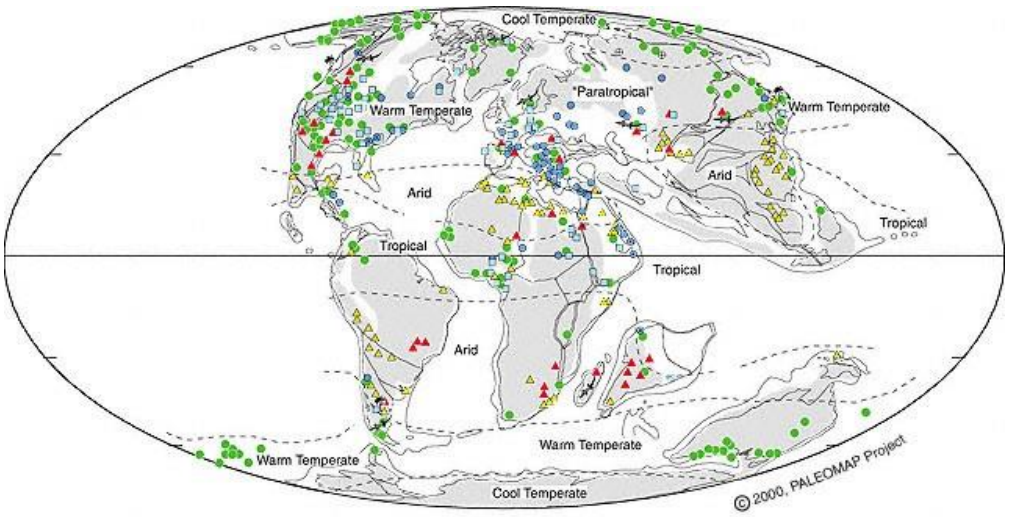
For instance, the Cretaceous Period from 145 million to 66 million years ago, which was especially prolific for oil formation, was a period with a relatively warm climate, resulting in high open sea levels and numerous shallow inland seas. These oceans and seas were populated with now-extinct marine reptiles, ammonites and rudists, while dinosaurs continued to dominate on land. And it is knowing this science that permits multi-billion barrel hydrocarbon needles to be found in the earth's vasty deep.

Needless to say, the climate warmed sharply during the Cretaceous, rising by about 8 degrees C, and eventually reached a level 10 degrees C warmer than today's on the eve of the asteroid-driven Great Extinction Event of 66 million years ago. As shown in the graph below, at that point, there were no ice caps at either pole, and Pangaea was still coming apart at the seams–so there was no circulating ocean conveyor system in the infant Atlantic.

Yet during the Cretaceous, CO2 levels actually went down while temperatures were rising sharply. That's the very opposite of the Climate Alarmists' core claim that it is rising CO2 concentrations which are currently forcing global temperatures higher.

Moreover, we are not talking about a marginal reduction in CO2 concentrations in the atmosphere. Levels actually dropped sharply from about 2,000 ppm to 900 ppm during that 80 million year stretch. This was all good for hydrocarbon formation and today's endowment of nature's stored work, but it was also something more.To wit, it was yet another proof that planetary climate dynamics are far more complicated and ridden with crosscurrents than the simple-minded doom loops now being used to model future climate states from the current far lower temperature and CO2 levels.

As it happens, during the periods since the Great Extinction Event 66 million years ago, both vectors have steadily fallen; CO2 levels continued to drop to the 300–400 ppm of modern times, and temperatures dropped another 10 degrees Celsius.



Upper Cretaceous

It is surely one of the great ironies of our times that today's fanatical crusades against fossil fuels are being carried out with not even a nod to the geologic history that contradicts the entire "warming" and CO2 concentration hysteria and made present energy consumption levels and efficiencies possible.

That is to say, the big, warm and wet one (the Mesozoic) got us here. True global warming is not the current and future folly of mankind; it is the historical enabler of present-day economic blessings. Yet, here we are on the eve of COP26, manically focused on reducing emissions to the levels required to keep global temperatures from rising more than *1.5* degrees Celsius from *preindustrial levels*.

Then again, exactly which pre-industrial level might that be? Suffice it to say that the chart below reflects broadly accepted geologic science. Still, we are hard-pressed—even with the aid of a magnifying glass—to see any time in the last 66 million years in which the global temperatures weren't a lot higher than 1.5 degrees Celsius above current levels—even during much of the far-right margin labeled the "Pleistocene *Ice Age*" of the past 2.6 million years.

If your brain is not addled by the climate change narrative, the very term rings a resoundingly loud bell. That's because there have been on the order of 20 distinct "ice ages" and interglacial warming periods during the Pleistocene, the latest of which ended about 18,000 years ago and from which we have been digging out ever since.

Of course, the climb away from retreating glaciers in Michigan, New England, northern Europe, etc. to warmer, more hospitable climes has not been continuously smooth, but rather a syncopated sequence of advances and retreats. Thus, it is believed that the world got steadily warmer until about 13,000 years ago, which progress was then interrupted by the Younger Dryas, when the climate became much drier and colder and caused the polar ice caps to re-expand and ocean levels to drop by upwards of 100 feet as more of the earth's fixed quantity of water was reabsorbed back into the ice packs.

After about 2,000 years of retreat, however, and with no help from the humans who had repaired to cave living during the Younger Dryas, the climate system swiftly regained its warming mojo. About 8,000 years ago, during the subsequent run-up to what the science calls the Holocene Optimum, global temperatures rose by upwards of 3 degrees Celsius on average and up to 10 degrees Celsius in the higher latitudes.

And it happened quite rapidly. One peer-reviewed study showed that in parts of Greenland, temperatures rose 10°C (18°F) in a single decade. Overall, scientists believe that half of the rebound from the "ice age" conditions of the Younger Dryas may have occurred in barely 15 years. Ice sheets melted, sea levels rose, forests expanded, trees replaced grass and grass replaced desert—all with startling alacrity.

In contrast to today's climate models, Mother Nature clearly did not go off the rails in some kind of linear doomsday loop of ever-increasing temperatures and without any hectoring from Greta, either. Actually, Greenland got all frozen up and thawed several more times thereafter.

Needless to say, the Holocene Optimum 8,000 years ago is not the "preindustrial" baseline from which the Climate Howlers are pointing their phony hockey sticks. In fact, other studies show that, even in the Arctic, it was no picnic time for the polar bears. Among 140 sites across the western Arctic, there is clear evidence for conditions that were *warmer than now at 120 sites*. At 16 sites for which quantitative estimates have been obtained, local temperatures were on average 1.6 °C higher during the optimum than they are today.

Say what? Isn't that the same +1.6 degrees C above current levels that the COP26 folks are threatening to turn off the lights of prosperity to prevent?

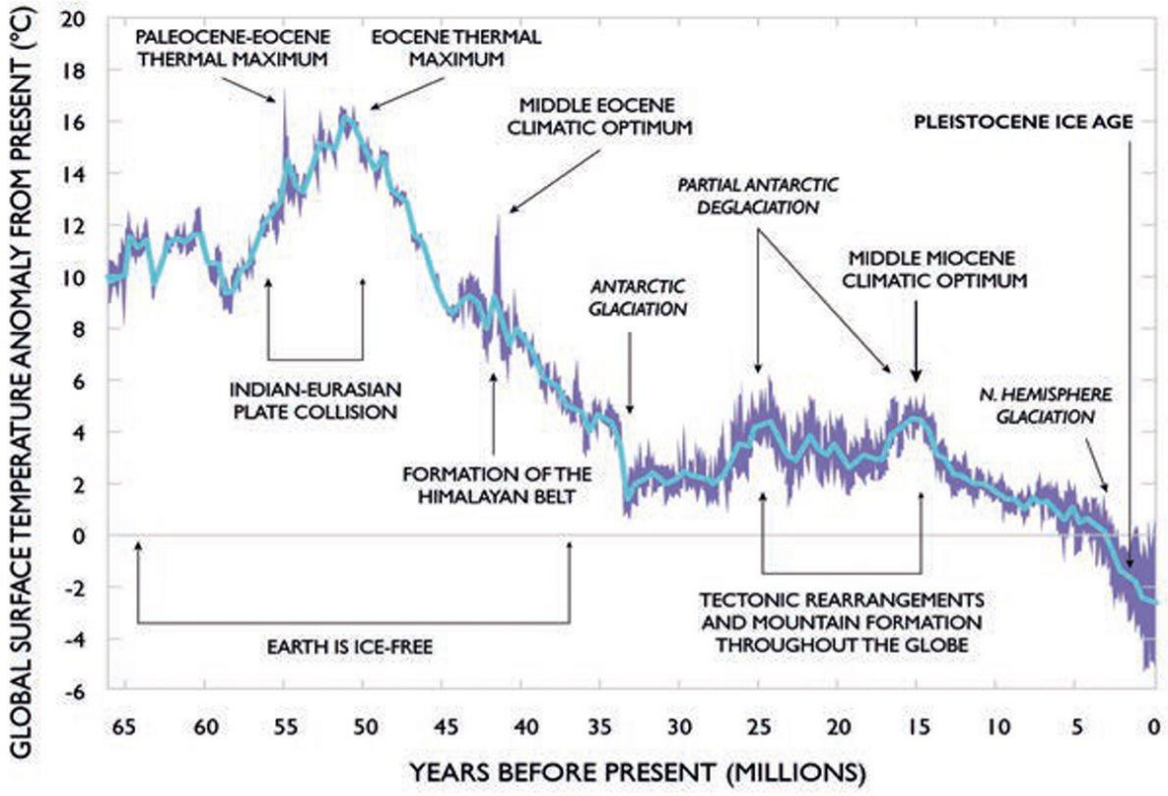
In any event, what did happen was far more beneficent. To wit, the warmer and wetter Holocene Optimum and its aftermath gave rise to the great river civilizations 5,000 years ago, including the Yellow River in China, the Indus River in the Indian subcontinent, the Tigris-Euphrates and the Nile River civilizations among the most notable.

Stated differently, that +1.6 degrees C was reflective of the climate-based catalyzing forces that actually made today's world possible. >From the abundances of the river civilizations, there followed the long march of agriculture and the economic surpluses and abundance that enabled cities, literacy, trade and specialization, advancement of tools and technology and modern industry—the latter being the ultimate human escape from a life based on the back muscles of man and his domesticated animals alone.

At length, the quest for higher and higher industrial productivity spurred the search for ever-cheaper energy, even as intellectual, scientific and technological advances which flowed from these civilizations led to the rise of a fossil fuel-powered economy based on energy companies harvesting the condensed and stored solar BTUs captured by Mother Nature during the planet's long warmer and wetter past.

In a word, what powers prosperity is ever more efficient "work," such as moving a ton of freight by a mile or converting a kilogram of bauxite into alumina or cooking a month's worth of food. Alas, during the 230 million mainly ice-free years of the Mesozoic, the planet itself accomplished one of the greatest feats of "work" ever known: Namely, the conversion of massive amounts of diffuse solar energy into the high-density BTU packages embodied in coal, oil and gas-based fuels.

As it happens, when one of the previous "preindustrial" warming eras (the Roman Warming) was coming to an end in the late 4th century AD, St. Jerome admonished the faithful "never look a gift horse in the mouth." Yet that's exactly what the assembled nation's are doing at COP26.



Dynamics of global surface temperature during the Cenozoic Era reconstructed from ^{18}O proxies in marine sediments (Hansen et al. 2008)

Figure 25. Until Antarctic glaciation began 33 million years ago, the Earth had been completely ice-free for more than 200 million years, since the end of the Karoo Ice Age. The present Pleistocene Ice Age is considered to have begun when the Arctic began to freeze about 2.6 million years ago. the very slight warming of 1.2°C since the year 1850 to 1.2°C (2.2°F), is inconsequential compared to the long history of the planet (After Hansen, et al., 2008).*

* Hansen, et al., "Target Atmospheric COsub2: Where Should Humanity Aim?, "The Open Atmosphere Science Journal," 2008, 2, pp217-231. https://pubs.giss.nasa.gov/docs/2008/2008_Hansen_ha00410c.pdf.

The assembled governments of the world meeting in Glasgow for COP26 are fixing to declare war on the backbone of modern economic life and the abundance and relief from human poverty and suffering with which it has gifted the world. We are referring, of course, to its agenda to essentially drive fossil fuels—which currently make up 80% of BTU consumption—from the global energy supply system over the next several decades.

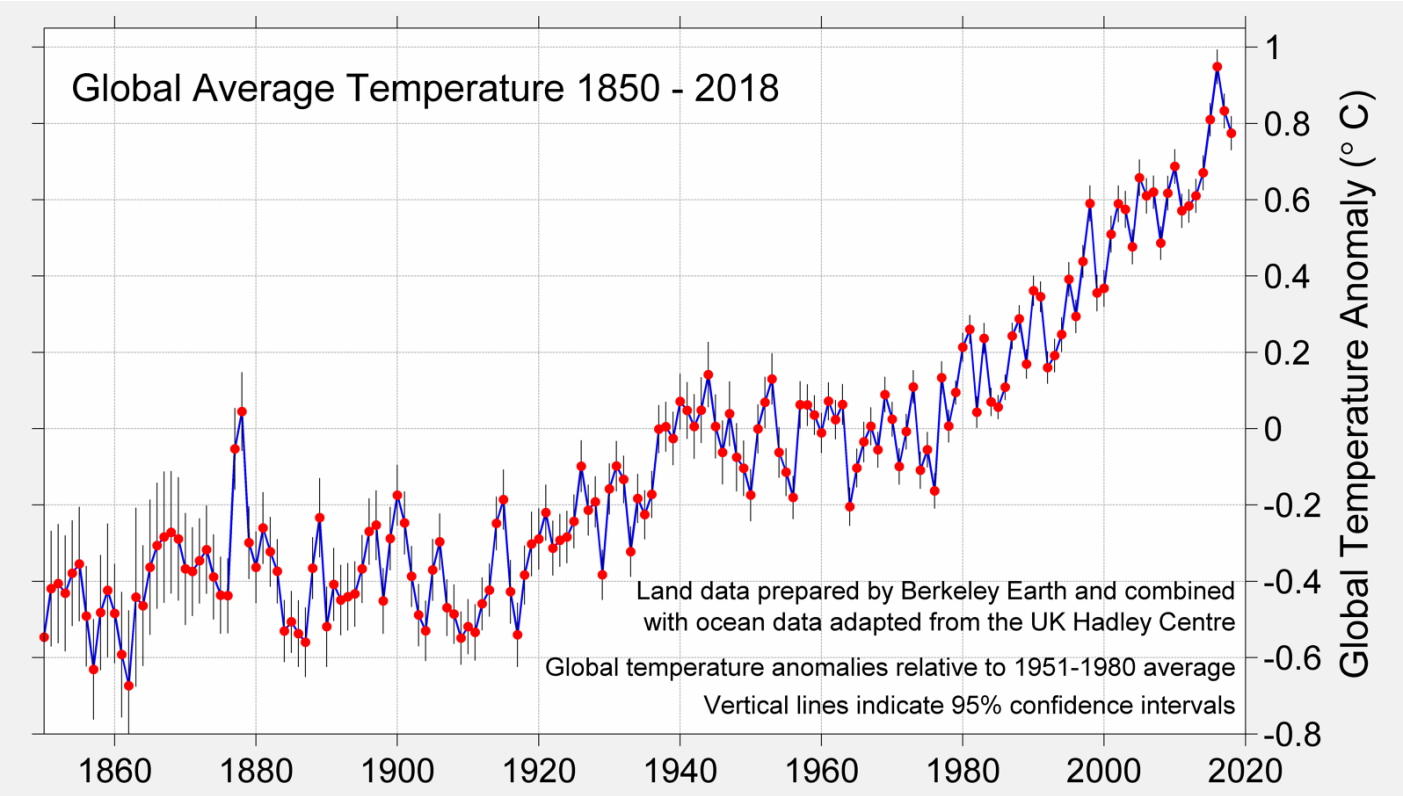
All of this is being done in the name of preventing global temperatures from rising by *1.5 degrees* Celsius above "pre-industrial" levels.

But when it comes to the crucial matter of exactly which pre-industrial baseline level, you can see the skunk sitting on the woodpile a mile away. That's because global temperatures have been higher than the present—often by upward of 10–15 degrees Celsius—for most of the past 600 million years!

Moreover, during the more recent era since the great extinction event 66 million years ago, the decline in temperatures has been almost continuous, touching lower than current levels only during the 100,000-year glaciation cycles of the last 2.6 million years of the Pleistocene ice ages. Not unsurprisingly, therefore, the

Climate Howlers have chosen to ignore *599,830,000* of those years in favor of the last *170* years (since 1850) alone. Still, the juxtaposition of the temperature record of the last 66 million years and the sawed-off charts of the climate alarmists tells you all you need to know: to wit, they have simply banished all the "inconvenient" science from the narrative.

Global Average Temperature Trend, 1850–2018 per the Global Warming Narrative



Needless to say, there is a reason why they start the graphs in 1850, and it is not just because it was the tail-end of the Little Ice Age (LIA), from which low point the temperature trend might well climb upwards for a time as climatic conditions normalized.

Actually, the intellectual deception is far more egregious. To wit, the Climate Howlers want you to believe the absolutely anti-scientific notion that the global climate was in general equipoise until the coal barons and the John D. Rockefeller's of the mid-19th century set off a dangerous chain of climate dysfunction as they brought the stored solar energy embedded in coal and petroleum to the surface and released its combustion by-products–especially CO2—into the ambient air.

The global warming narrative is the most risible manifestation yet of this leap into self-righteous disregard for evidence, logic, and plausibility. For when you step back from the shrill, sanctimonious narrative that passes for the global warming catechism, the ridiculousness of its central claim that industrial society is destroying the climatic equipoise of the planet is self-evident. What there's been is 4.5 billion years of wildly oscillating and often violent geologic evolution and climate disequilibrium owing to manifold natural causes, including: plate tectonics that has sometimes violently impacted climate systems, especially the assembly and breakup of Pangaea between 335 million and 175 million years ago, and the continuous drift of the present-day continents thereafter; asteroid bombardments; the 100,000-year cycles of the Earth's orbital eccentricity (it gets colder when it's at maximum elongation); the 41,000-year cycles of the Earth's tilt on its axis, which oscillates between 22.1 and 24.5 degrees and thereby impacts the level of solar intake;the wobble or precession of the earth's rotation which impacts climate over the course of its 26,000 year cycles; the recent 150,000 year glaciation and inter-glacial warming cycles; the 1500 year sunspot cycles, where earth temperatures fall during solar minimums like the Maunder Minimum of 1645-1715 at the extreme of the LIA when sunspot activity virtually ceased.

The natural climate change now underway is, therefore, the product of powerful planetary forces that long predated the industrial age and which massively exceed the impact of industrial era emissions. That the present conflation of these forces has resulted in a warming cycle is nothing new—warming has happened repeatedly even in modern times.

These modern warmings include the previously discussed Holocene Climate Optimum (5000 to 3000 BC); the Roman Warming (200 BC to AD 500); and, most recently, the Medieval Warm Period (AD 1000-1300). Current mildly rising temperatures are in keeping with the historical truth that warmer is better for humanity and most other species, too;

Continued planetary equipoise requires no interventions whatsoever by the state to retard the use of prosperity-fostering fossil fuels or to subsidize and accelerate the adoption of high-cost renewable energy. So the question recurs. What "pre-industrial" temperature baseline can be picked out of all these eras and all these climate change forces that would be anything but an arbitrary political, not science-based, choice?

After all, the science is agnostic. Mother Earth has weathered every kind of climate disequilibrium at both the colder and warmer ends of the spectrum and, crucially, experienced the eventual release of countervailing forces that took both temperature and CO2 levels back in the other direction.

We think the planet's climatic resilience is especially evident in the fact that, after five major ice ages, warming forces returned with robust energy until they reversed again, thereby proving there is no doomsday loop that leads in linear fashion to inexorable catastrophe as is embedded in the climate models.

There have naturally been extended periods of global warming in between these ice ages, but the last three listed below are of special significance. They all occurred during the last 600 million years of generally much hotter temperatures and CO2 concentrations that were 2–6 times higher than current readings.

That is to say, the last three ice ages prove better than anything else that the planet's subsequent warming cycles have been self-limiting and self-correcting. If that were not true, the earth would have been boiling into perdition eons ago:

Huronian (2.4–2.1 billion years ago),

Cryogenian (850–635 million years ago),

Andean-Saharan (460–430 million years ago),

Karoo (360–260 million years ago),

Quaternary (2.6 million years ago–present,

Regarding the most recent Quaternary era, the last glacier *r*etreat gathered warming steam about 14,000 years ago until it was interrupted by a sudden cooling at about 10,000–8500 BC, known as the aforementioned Younger Dryas. The warming resumed by 8500 BC.

By 5000 to 3000 BC, average global temperatures reached their maximum level during the Holocene Optimum and were 1 to 2 degrees Celsius warmer than they are today.

As we noted, during the Holocene Optimum, many of the Earth's great ancient civilizations began and flourished because conditions were especially hospitable for agriculture and the generation of economic surpluses. The Nile River, for instance, had an estimated three times its present volume, indicating a much larger tropical region. In fact, 6,000 years ago, the Sahara was far more fertile than today and supported large herds of animals, as evidenced by the Tassili N'Ajjer frescoes of Algeria.

That is to say, warmer and wetter was far better for mankind than prior bouts of cold. Nevertheless, from 3000 to 2000 BC, a renewed cooling trend occurred. The latter caused large drops in sea level and the emergence of many islands (Bahamas) and coastal areas that are still above sea level today.

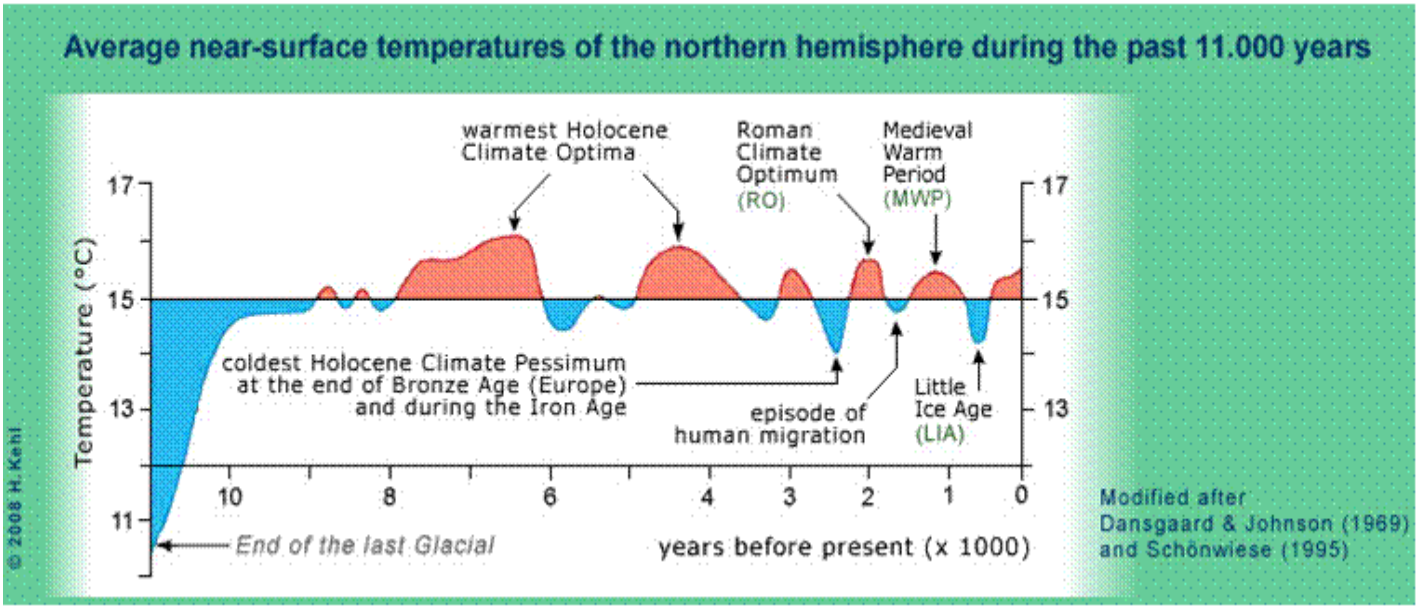
A short warming trend took place from 2000 to 1500 BC and the associated renewal of the Egyptian dynasties, followed once again by colder conditions from 1500 to 750 BC. This caused renewed ice growth in European continental glaciers and alpine glaciers, and a sea-level drop of between 2 and 3 meters below present-day levels. Incidentally, that period is also known as the Dark Ages and preceded the flowering of Greek and Roman civilizations.

The period from 750 BC to AD 800 brought a general warming trend, but it was not as strong as the Holocene Optimum. During the time of the Roman Empire, in fact, a cooling began that intensified after AD 600 and resulted in a renewed dark age that lasted until about AD 900.

During the AD 600–900 Dark Ages, global average temperatures were significantly colder than they are today. From writings of the time, we know that at its height, the cooling caused the Nile River (AD 829) and the Black Sea (AD 800–801) to freeze.

Thereafter came the crucial Medieval Warm Period from AD 1000 to 1300. As shown in the chart below, temperatures were at or above current readings during most of the period, which saw a rejuvenation of economic life, trade, and civilization in Europe.

Indeed, prior to the post-1850 warming, there had been five distinct warming periods (red areas) since the last glaciers with temperatures above current levels. Never, of course, does this chart see the light of day in the mainstream climate change narrative.



Also, during this period, the Vikings established settlements in Iceland and Greenland. Long before the industrial era, Greenland was so warm, wet, and fertile that major colonization occurred after AD 980. At its peak, it included upward of 10,000 settlers, extensive farming, numerous Catholic churches, and a parliament that eventually voted for union with Norway.

So, obviously, the Vikings named their settlement not because they were color blind but because it was hospitable to human settlement.

As another measure of comparison, studies show that the snow line in the Rocky Mountains was about 370 meters above current levels (it was warmer then than today).

Thereafter, the climate trend again reversed in the colder direction. There are ample records from around the world of floods, great droughts, and extreme seasonal climate fluctuations up to the 1400s. Horrendous floods devastated China in 1332 (reported to have killed several million people).

Likewise, by the 14th century, the Viking colony was lost to sea ice expansion, and the growing season got ever shorter, thereby undermining the economic viability of these farming settlements. Food eventually got so scarce that the remaining settlers' last winter turned out to be one of rampant cannibalism, as archeologists have documented with respect to the remains of the settlement pictured below.

As we said, warmer is better for mankind! Nor was the reversal from the hospitable climate of the Viking era settlements in Greenland merely a regional anomaly has some Climate Howlers have claimed. During the Medieval Warm period, great civilizations flourished in many other areas, which then became uninhabitable.

For instance, a great drought in the American southwest occurred between 1276 and 1299. Grand settlements like those in Chaco Canyon and Mesa Verde were abandoned. Tree-ring analysis has identified a period of no rain between 1276 and 1299 in these areas.

Needless to say, these extreme weather perturbations were not caused by industrial activity because there was none, and they occurred during a period when it was getting colder, not warmer!

From 1550 to AD 1850, global temperatures were at their *coldest* since the beginning of the Holocene 12,000 years ago. Hence the designation of this period as the Little Ice Age (LIA).

In Europe, glaciers came down the mountains, thereby covering houses and villages in the Swiss Alps while canals in Holland froze for three months straight, a rare occurrence before or after. Agricultural productivity also dropped significantly, even becoming impossible in parts of northern Europe. The cold winters of the Little Ice Age were famously recorded in Dutch and Flemish paintings, such as Hunters in the Snow by Pieter Bruegel (c. 1525–69).

From 1580 to 1600, the western part of the United States also experienced one of its longest and most severe droughts in the last 500 years. Cold weather in Iceland from 1753 to 1759 caused 25% of the population to die from crop failure and famine. Newspapers in New England called 1816 "the year without a summer."

Self-evidently, when the LIA finally ended around 1850, global temperatures were at a modern nadir (no wonder the Climate Howlers start their charts in the middle of the 19th century).

But the significance of this fact goes well beyond cropping the temperature charts at 1850. Actually, in order to erase the above-described oscillations of the modern climate, climate change advocates have actually gone so far as to literally attempt to airbrush them out of existence.

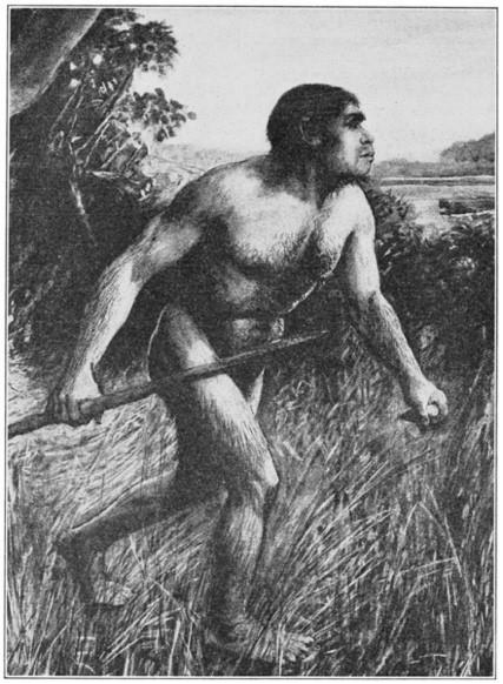
We are referring to what we call the climate "Piltdown Mann," named for one Michael Mann, a newly minted Ph.D. (1998) who became the International Panel on Climate Change's (IPCC) lead investigator and advocate for what famously became the "hockey stick" proof of global warming.

The latter, of course, was the blatant fraud embedded in the image that Al Gore made famous in his propagandistic movie "An Inconvenient Truth" in 2006. Suffice to say, the purpose of the hockey stick was to wipe out all the evidence summarized above.

That is, in lieu of the planet's long-term and recent severe climate oscillations, the IPCC posited an entirely opposite thesis. Namely, for the pre-industrial millennium before 1900, global temperatures were nearly as flat as a board.

Accordingly, only when the industrial age got a head of steam and reached full force after 1950 did today's warming temperatures first appear, or so it was alleged. The suggestion, of course, was that an uncontrolled temperature breakout to the upside was well underway and that a planetary disaster was just around the corner.

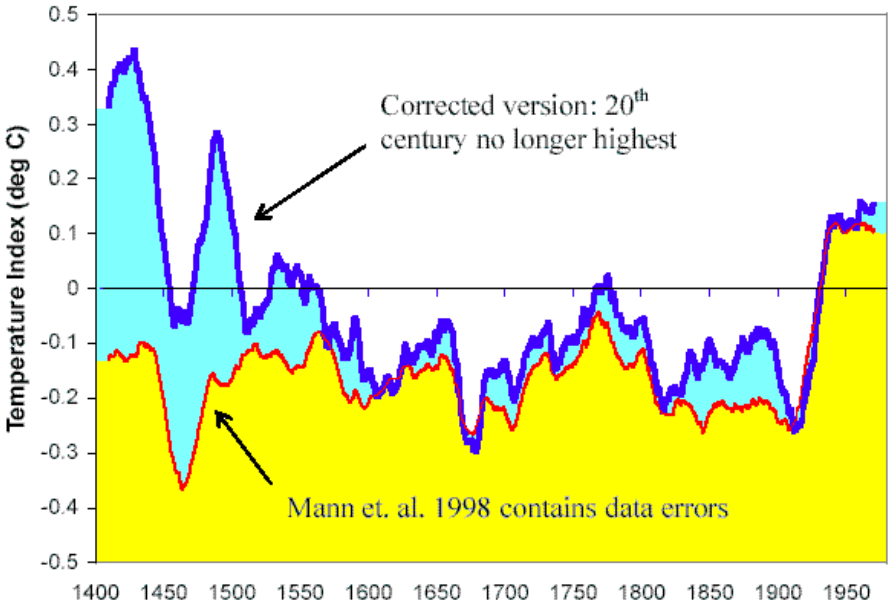
The only problem is that Mann's graph was as phony as the Piltdown Man itself—the latter famously being confected in England in 1912 and conveniently "discovered" by an amateur anthropologist who claimed it was the missing link in human evolution. At length, it was shown that the fossil was a forgery; it consisted of a modern human cranium and an orangutan jaw with filed-down teeth.



In the case of the graph, Professor Mann and his accomplices at the IPCC doctored the evidence, used misleading data from southwestern US tree rings in lieu of abundant alternative data showing the contrary, and jiggered their computer models to generate pre-specified results.

That is, the models were produced by *goal-seeking on the part* of Mann and his associates to prove the man-made warming thesis. In essence, this was accomplished by simply pasting modern temperature records showing steady increases on top of a pre-industrial baseline that never happened.

The phony pre-industrial baseline is depicted by the yellow area in the graph for the period 1400–1900. The hockey stick-like eruption of the yellow space after 1900, of course, allegedly depicts the man-made temperature rise since the onset of the hydrocarbon age.



By contrast, the corrected version is in blue. In this version—which comports with the history of climate oscillations cited above—there is no hockey stick because the shaft never happened; it was *invented* by computer model manipulations, not extracted from the abundant scientific data on which the Mann study was allegedly based.

So the question is answered. The mid-19th century is exactly the wrong baseline from which to measure global temperature change during modern times.

The blue area of the chart, in fact, is the smoking gun that obliterates the whole predicate on which COP26 is being foisted upon the everyday people of the world.

Editor's Note: Western countries are leading the charge in restructuring their economies around the issue of climate change. They're committed to a comprehensive agenda to "decarbonize" their economies by 2050.

That means these governments will wage a new war on carbon emissions.

And it's just getting started...What comes next, is more government intervention and likely a carbon tax.