

OUR CORE CLIMATE SCIENCE TEAM BOTTOM-LINE ON THE SCIENTIFIC VALIDITY OF EPA'S 2009 GHG ENDANGERMENT FINDING

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1993 Landmark Supreme Court Daubert Decision

Manipulated and Omitted Unfavorable Observations.

Since theories are tested with observations, fabricating and omitting unfavorable facts to make a theory work is an egregious violation of scientific method.

Richard Feynman stated this fundamental principal of scientific method:

“If you’re doing an experiment, you should report everything that you think might make it invalid – not only what you think is right about it... Details that could throw doubt on your interpretation must be given, if you know them.” 1974 Caltech commencement address, Surely, You're Joking, Mr. Feynman! (1985), p. 311-12

U.S. Supreme Court on Science.

The U.S. Supreme Court has adopted essentially the same view of science, starting in **1993 with its landmark Daubert decision:**

“[I]n order to qualify as ‘scientific knowledge,’ an inference or assertion must be derived by the scientific method,” “any and all scientific testimony or evidence admitted [must be] ...reliable,” “tested,” and “supported by appropriate validation.” Daubert v. Merrell Pharmaceutical, Inc., 509 U.S. 579 (1993) (emphasis added).

As to peer review, the Supreme Court similarly explained that peer review can be helpful but "does not necessarily correlate with reliability" because "in some instances well-grounded but innovative theories will not have been published." Daubert, supra, p. 593.

Thus, scientific knowledge is determined by scientific method, testing theory with observations, not by consensus, government opinion, peer review or manipulated data.

ACKNOWLEDGEMENTS

All of the climate research cited herein was also cited in the “SEVENTH SUPPLEMENT TO PETITION FOR RECONSIDERATION OF “ENDANGERMENT AND CAUSE OR CONTRIBUTE FINDINGS FOR GREENHOUSE GASES UNDER SECTION 202(a) OF THE CLEAN AIR ACT”” which was Filed on June 9, 2021 by the

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The authors of this document would like to thank their coauthors of two very key Research Reports cited in the Petition. First, Dr. John R. Christy, a coauthor of “On the Existence of a “Tropical Hot Spot” & The Validity of EPA’s CO₂ Endangerment Finding”, Abridged Research Report, Second Edition by Dr. James P. Wallace III, Dr. John R. Christy & Joseph S. D’Aleo, April 2017. The authors would also like to thank here our Named Peer Reviewers:

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Second, we would also like to thank Dr. Craig D. Idso, coauthor of “On the Validity of NOAA, NASA and Hadley CRU Global Average Surface Temperature Data & The Validity of EPA’s CO₂ Endangerment Finding, Abridged Research Report, by Dr. James P. Wallace III, Joseph S. D’Aleo & Dr. Craig D. Idso, June 2017. In addition, the authors of this document would like to thank here the Named Peer Reviewers of this key Research Report:

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Finally, the authors would like to be clear that while we take total responsibility for any errors found in our work going forward from here, we are extremely thankful for the input we received from the Peer Reviewers who each knew from the beginning they were agreeing to be named. The lead author feels that is why to date he has received no comments whatsoever pointing out mathematical or logical errors.

PREFACE

Climate Change Alarmism has led to decades of regulation and attempts to “fundamentally change our Country.” Many respected scientists are now starting to speak out against such climate alarmism. Unfortunately, papers and talks rebutting the Climate Change Alarmists’ Claims will not accomplish the only thing that will stop the current onslaught of climate-related regulations in America. **As long as EPA’s 2009 Greenhouse Gas (GHG) Endangerment Finding is in place, State and Federal Courts will require that GHGs must be regulated.**

The Science Team’s work presented here is unique and very important because its work alone represents the research findings of a team of scientists which was begun in 2009 for the sole purpose of focusing on research designed to “properly test” the validity of the fundamental science claims underpinning EPA’s 2009 GHG Endangerment Finding. The lead author of this document assembled from scratch a multi-disciplinary team of scientists who together had all of the skills necessary to understand and then evaluate GHG impacts on climate. Once assembled, the Team quickly focused on quantifying, in a scientifically/mathematically rigorous fashion, any GHG impacts on Global Average Surface Temperature as well the temperatures of the tropical ocean and tropical atmosphere. The science team had all the requisite skills through 2019 when it finished its work conclusively finding that EPA’s 2009 GHG Findings were totally invalid. The Research findings presented here are the end result of this highly experienced Science Team’s singular focus on mathematically rigorous testing of the validity of all Three of EPA’s 2009 GHG Endangerment Finding Claims.

The essential findings of this Team’s research have never before been shared in a sixteen-page document, using terminology that the general public can readily understand. This is because up until now its audience was EPA and the relevant Courts. Finally reaching the Supreme Court was still not enough as this Court ducked a hearing on the merits and totally sidelined our Science Team’s effort by a denial on December 11, 2023, based on a claimed lack of “standing” of the Plaintiffs. The science Team’s argument herein is that there is absolutely no valid scientific basis for regulating CO₂ by reducing America’s reliance on fossil fuels. The research findings are that all of the GHGs are in actuality Beneficial Gases, not Pollutants. Thus serious, totally unnecessary damage to America’s Economic and National Security continues.

This document has six PARTs and two Appendices. PART I defines all three “Lines of Evidence” contained in EPA’s 2009 GHG Endangerment Finding. PART II & PART III, each independently, invalidate all three Lines of Evidence contained in EPA’s Endangerment Finding. PART IV invalidates all the other typical Climate Alarmists Claims. PART V provides the proof that all currently regulated GHGs are actually not Pollutants, but rather Beneficial gases. PART VI provides the Science Team and its Legal Team Recommendations Based on the Team’s Climate Science Arguments.

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AUTHOR COMMENTS

All research by the authors of this document cited herein was peer-reviewed, published and purposely set up so as to be easily reproducible. No rebuttals have been received by the lead author from any person or entity. The research effort, that began in 2009, is all still being carried out on a pro bono basis.

PART II provides an easy to understand, corroborated proof that EPA's 2009 GHG Endangerment Finding is fatally flawed.

Nevertheless, the Supreme Court saw fit to Totally Ignore the Science Team's arguments provided verbatim in Appendix II denying consideration thereof based on "standing issues."

THE THREE LINES OF EVIDENCE IN EPA'S 2009 GHG ENDANGERMENT FINDING PART I

On June 9, 2021 the Petitioners filed the 7th Supplement to its initial filing requesting EPA Reconsideration of the 2009 Green House Gas (GHG) Endangerment Finding. (See: <https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (called "Suppl. #7". The text below cites verbatim from pages 5-8)

"EPA's Endangerment Finding appears at 74 C.F.R., page 66,495, et seq. At page 66,518, EPA sets forth the three "lines of evidence" upon which the Agency says it has attributed "observed climate change" to "anthropogenic activities," thus providing the basis for the finding that human GHG emissions endanger human health and welfare. More information about the nature of each of the three "lines of evidence" can be gleaned from EPA's further elaboration in the Endangerment Finding itself and the associated Technical Support Document.

The first line of evidence, according to EPA, arises from our basic physical understanding of the effects of changing concentrations of greenhouse gases, natural factors, and other human impacts on the climate system. Intrinsic to the "basic physical understanding" in the first "line of evidence" is the "greenhouse gas fingerprint" or "Tropical Hot Spot" theory, which is that in the tropics, the upper troposphere is warming faster than the lower troposphere and the lower is warming faster than the surface, all due to rising atmospheric greenhouse gas concentrations blocking heat transfer into outer space. By this mechanism, increasing greenhouse gas concentration is assumed to increase global surface temperatures.

The second line of evidence arises from direct and indirect historical estimates of past temperatures showing that the changes in global surface temperature over the last several decades are unusual. More specifically, the second "line of evidence" refers to EPA's claim that Global Average Surface Temperatures {GAST} have been rising in a dangerous fashion over the last fifty years.

The third line of evidence arises from the use of computer-based climate models to simulate the likely patterns of response of the climate system to different forcing mechanisms (both natural and anthropogenic). Hence, the third "line of evidence" consists of EPA's reliance on climate models (not actually "evidence") where greenhouse gases are a key determinant of global warming. EPA uses climate models for two purposes: to "attribute" warming to human-caused GHG emissions, and to set regulatory policy for such emissions based on their modeled impact on global temperatures. See <https://thsresearch.files.wordpress.com/2017/04/ef-epa-petitionforreconsiderationof-ef-final-1.pdf>, pages 8-9.

The assumption that Global Average Surface Temperature Data is a valid representation of reality is critical to all three lines of evidence in EPA's GHG/CO₂ Endangerment Finding. This may be easily seen by reviewing in this context each line of evidence as defined above. Stated simply, first, the Tropical Hot Spot (THS) is claimed to be a fingerprint or signature of atmospheric and Global Average Surface Temperatures (GAST) warming caused by increasing GHG/CO₂ concentrations.¹ If the GAST is invalid, no such proof is possible.

Second, higher atmospheric CO₂ and other GHG concentrations are claimed to have been the primary cause of the claimed record setting GAST over the past 50 years or so – when viewed in a past 120+ year context. Validation of this second Line of Evidence obviously also requires valid GAST data.

Third, climate models are claimed by EPA to be valid for policy analysis purposes, that is, their predictions of the impact of rising CO₂ concentration levels on future GAST levels are claimed to be credible. Thus, GAST is the critical (dependent) variable in all the climate models that EPA has relied upon. These climate models are also critical to the Social Cost of Carbon (SCC) estimates used to justify a multitude of regulations across U.S. Government agencies. - - - Note that these are the climate models and the associated 2009 GHG Endangerment Finding that EPA relied upon in its policy analysis supporting, for example, its Clean Power Plan - which actually required a new Stationary Source Endangerment Finding. **Invalidation of the 2009 Endangerment Finding invalidates all subsequent EPA Findings in that they all rely on the validity of the 2009 Finding.** (See [CHECC CPP ANPRM Replacement Comment FINAL to EPA 022618](#), page 6)

To summarize, first, surface temperature records are one of EPA's three lines of evidence upon which it relies to attribute observed warming to human GHG emissions. Second, valid and reliable temperature records of long duration are a logical prerequisite to forming the “basic physical understanding” of climate, and third, to developing and validating climate models². It is therefore inescapable that if the GAST products from NOAA, NASA and Hadley CRU are invalid, then both the “basic physical understanding” of climate and the climate models themselves will also be invalid. (See <https://thsresearch.files.wordpress.com/2017/07/ef-gast-data-secondsupplementtopetitionfinal.pdf>, page 2) Clearly, if GAST data is not valid, neither is the 2009 GHG Endangerment Finding nor any subsequent GHG Findings.”

¹ See http://icecap.us/images/uploads/ImportanceoftheHotSpot_093016_.pdf

See also U.S. Climate Change Science Program, Synthesis and Assessment Product 1.1, Temperature Trends in the Lower Atmosphere - Understanding and Reconciling Differences, Chapter 1, p. 18-19, https://www.gfdl.noaa.gov/bibliography/related_files/vr0603.pdf

² See, e.g., U.S. Climate Change Science Program, Synthesis and Assessment Product 1.3, § 1.3.2, p. 9; § 3.1.2, pp. 53-54 describing logical dependence of the physical understanding of climate, modeling and attribution on accurate temperature records.

OUR CORE CLIMATE SCIENCE TEAM BOTTOM-LINE ON THE IMPLICATIONS OF GLOBAL AVERAGE SURFACE TEMPERATURE (GAST) DATA FABRICATION PART II

On December 11, 2023, the Supreme Court refused to examine the numerous science-based arguments contained in a Petition for Reconsideration of EPA's 2009 Green House Gas (GHG) Endangerment Finding filed on June 9, 2021. (See: <https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (called "Suppl. #7")) This court ignored the specific scientific arguments contained in the Petition as spelled out to it (basically per the text in PARTS II-IV below) and simply denied the Petition claiming the petitioners did not have Standing – a well-known tactic to avoid decisions in a highly politically-charged situation.

Unfortunately, this Supreme Court decision denied scrutiny to the one regulation in the U.S. that is not only the single most economically significant, but also the single most scientifically flawed, of all of the regulations on the Federal books.

The "three Lines of Evidence" in the 2009 GHG Endangerment Finding (See PART 1) provide the entire scientific basis for the current all-of-government avalanche of regulations that supposedly are going to "save the planet" by eliminating from the American way of life its most robustly available, highly reliable and cost-effective energy sources. This avalanche of regulations, from every corner of the bureaucracy, includes not just the *Electric Power Plant Rule* and the *Vehicle Rule*, but dozens of additional rules, proposed rules and administrative actions of every sort imaginable.

In fact, such regulation includes actions to suppress drilling for oil and gas, actions to block pipelines from getting built, actions to end energy resource extraction on Federal lands, actions to eliminate the use of coal entirely, actions that actually make washing machines and dryers and dishwashers less functional, actions to require massive and costly emissions and financial impact disclosures from all public companies, actions to ban or restrict heating or cooking using natural gas; and involve hundreds of billions of dollars of taxpayer subsidies for energy sources much less cost effective than those now used, and hundreds of similar costly actions from throughout the government.

The legality of all of these actions is entirely based on, and has no scientific justification other than, that provided by the 2009 *GHG Endangerment Finding*. The U.S., unlike other nations, by law must regulate GHGs as long as this GHG Finding is in place. To estimate that the cost to Americans of this *Endangerment Finding* is in the hundreds of billions of dollars is to understate the matter by at least an order of magnitude, and more likely two to three orders. If forced by the America's current regulatory authorities to proceed to its end, the cost will likely be many trillions of dollars.

This means that the American people will be left far, far poorer, and our energy, economic and national security will each be put in even more grave jeopardy. However, EPA's scientific basis for its 2009 *GHG Endangerment Finding* has been shown to have been built on quicksand. **The *GHG Endangerment Finding* is the most economically significant of all Federal regulations, but its supposedly sound scientific basis is easily proven to be a house of cards.** The 2009 *Endangerment Finding*, as one of its three Lines of Evidence, claimed that the Earth had been facing record-setting Global Average Surface Temperatures. These EPA claims continue today. Furthermore, the Global Average Surface Temperature data have been, and continue to be, totally fabricated because, for a very significant portion of the planet, there was no surface temperature data whatsoever. This fabrication was done to provide support for global warming claims and was carried out by all three entities providing GAST data measurement, NOAA, NASA and the UK's Hadley CRU.

For example, the Southern Hemisphere is 80.9% ocean, and prior to the year 2000 there were no credible monthly ocean surface temperature data whatsoever for this massive area. This fact alone means that until 2000, the surface temperature record had no data whatsoever for over 40% ($50\% \times 0.809$) of the planet. But the situation is even worse than that because for much of the quoted surface temperature record since about 1850, there are virtually no credible monthly surface temperature data outside of North America and Europe. (See Suppl. #7, pages 3-5)

As one of its *Three Lines of Evidence*, EPA falsely claimed in its 2009 *GHG Endangerment Finding* that Global Average Surface Temperatures were setting records solely because of increasing greenhouse gas emissions. But proof that the Global Average Surface Temperature data are fabricated invalidates this claim. Moreover, the invalidation of these Global Average Surface Temperature data has been shown by the Petitioners to invalidate each of the other two *Lines of Evidence* in EPA's 2009 *Endangerment Finding* and thus all subsequent *GHG Endangerment Findings* -since their scientific justification all rest on the 2009 Finding. In fact, Climate Models simply cannot provide credible Global Average Surface Temperature forecasts based on this fabricated historical data, and thus the Climate Model Line of Evidence is also invalidated. (See "Suppl. #7", pages 5-8 and the TECHNICAL APPENDIX on page 13.)

The petitioners' science-related arguments stated above were not even rebutted by the EPA. To this day, they have been simply ignored. Moreover, a separate science-based argument that, in fact, all greenhouse gases have negative social costs has, to date, also not been invalidated. (See PART V below) **This proves that GHGs are really beneficial gases requiring no climate-motivated regulation at all.** (See "Suppl. #7", pages 1-2) All work cited here was peer-reviewed, published and purposely set up so as to be easily reproducible and no rebuttals have been received by the lead author.

OUR CORE CLIMATE SCIENCE TEAM BOTTOM-LINE ON THE CLIMATE FACTS THAT THE AMERICAN PUBLIC HAS NOT HAD THE OPPORTUNITY TO EVALUATE PART III

The public has been inundated with climate change alarms and scary forecasts for decades. However, the science of climate change is very complicated. The Earth's climate process is what many climate scientists now recognize to be a "chaotic process". This fact has enormous consequences. For one, it means that it has been totally fruitless to even attempt to develop and validate Pure Physics-based Climate Models that could (in a mathematically rigorous fashion) forecast the impact of increasing Green House Gases (GHGs) on Global Average Surface Temperature. But this is exactly what has been attempted. Moreover, as one of its three Lines of Evidence, EPA's 2009 GHG Endangerment Finding claimed Climate Model success. This Endangerment Finding provides the claimed scientific basis for all GHG-related regulation. Since 2009, numerous International Panels have stated their views; groups of scientists and Think Tanks have published, testified and spoken. Politics has reigned supreme in many of these forums. However, climate model development and validation can only be accomplished by using a team approach including experts from all of the related and relevant disciplines. Based on such a team's work, a Petition for Reconsideration of the 2009 GHG Endangerment Finding was filed with EPA. (See: <https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (hereafter called "Suppl. #7"))

On December 11, 2023, the Supreme Court elected to ignore the scientific arguments contained in the Petition and simply denied the Petition, claiming the petitioners did not have Standing – a well-known tactic to avoid decisions in a highly politically charged situation. Unfortunately, this Supreme Court decision denied public scrutiny of the credibility of the science arguments behind the one regulation that is not only the single most economically significant, but also the single most scientifically flawed, of all the regulations on the Federal books.

To prove that changes in atmospheric GHG concentration levels have had a statistically significant positive impact on the Earth's atmospheric or surface temperatures, proper mathematical methods must be utilized by the analysts. Using such analysis tools, new climate research findings were published in April 2017 entitled: *On the Existence of a "Tropical Hot Spot" & The Validity of EPA's CO₂ Endangerment Finding, Abridged Research Report, Second Edition*. (See Suppl. #7, pages 8 - 9). **This Research has proven that EPA's basic claim that CO₂ is a pollutant is totally false.** Quoting from this Report, "Using proper mathematical methods, this research failed to find that the steadily rising atmospheric CO₂ concentrations have had a statistically significant impact on any of the 14 temperature data sets that were analyzed.

It should be noted here that every effort was made to minimize complaints that this analysis was performed on so-called “cherry picked temperature time series.” To avoid even the appearance of such activity, the authors divided up responsibilities, where Dr. John Christy of UAH was tasked to provide a tropical temperature data set that he felt was most appropriate and credible. The tropospheric and surface temperature data measurements that were analyzed were taken by many different entities using balloons, satellites, buoys and various land-based techniques. Needless to say, if, regardless of data source, the analysis results are the same, the analysis findings should be considered highly credible. These Research findings also rigorously confirmed the results of two previous papers.” (See Suppl. #7, page 9)

“The Report’s analysis results invalidate EPA’s CO₂ Endangerment Finding, including the climate models that EPA has claimed can be relied upon for policy analysis purposes. These results amply demonstrate that CO₂ is not a required explanatory variable. Instead, these research results clearly demonstrate that once the solar, volcanic and oceanic/atmospheric activity (that is, natural factors) impacts on temperature data are accounted for, there is no “record setting” warming to be concerned about. **In fact, there is no Natural Factor-Adjusted Warming at all.**

There is one more important point to make as to why climate models are such a dismal failure in fit and forecasting. Embedded in every climate model is the Tropical Hot Spot {THS} theory which requires rising atmospheric CO₂ concentration to impact tropical atmospheric and surface temperatures in a specific and statistically significant fashion. (See PART I) The results from this research are as follows: Adjusting for just the Natural Factor impacts, NOT ONE of the Nine (9) Tropical temperature time series analyzed above were consistent with the EPA’s THS Hypothesis. {See: TECHNICAL APPENDIX on page 13 below.}

Moreover, CO₂ did not even come close to having a statistically significant impact on a single one of these temperature data sets. The generic model worked extremely well in all 9 cases from an econometric structural analysis standpoint. It delivered a highly credible set of consistent research results that invalidate the THS theory, and with it, what EPA claims to be the basic physical understanding of climate.” (See Suppl. #7, pages 8-13) All work cited above was peer-reviewed, published and purposely set up so as to be easily reproducible. No rebuttals have been received by the lead author. All research was done pro bono.

In summary, the climate models that EPA has heavily relied upon are fundamentally flawed and cannot be used to attribute global warming to rising atmospheric CO₂ concentrations levels. Note that this THS Invalidation process was carried out totally independent of the global surface temperature data fabrication issue. Yet the Supreme Court ignored all such science arguments and denied the petition for reconsideration.

OUR CORE CLIMATE SCIENCE TEAM BOTTOM-LINE: AS SEPARATE FALSIFIABLE HYPOTHESES, EACH OF THE CLIMATE ALARMIST CLAIMS IS REJECTED.

PART IV

On December 11, 2023, the Supreme Court refused to examine the numerous science-based arguments contained in a Petition for Reconsideration of EPA's 2009 Green House Gas (GHG) Endangerment Finding. (See: <https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (called "Suppl. #7") This Court ignored the specific scientific arguments contained in the Petition as spelled out to it (basically as per the quoted text below) and simply denied the Petition claiming the petitioners did not have Standing – a well-known tactic to avoid decisions in a highly politically-charged situation. Unfortunately, this Supreme Court decision denied scrutiny to the one regulation in the U.S. that is not only the single most economically significant, but also the single most scientifically flawed, of all of the regulations on the Federal books. GHG regulation is frequently simply justified based on various Climate Alarmists Claims. Alarmist claims rebuttal analysis results of this Team's ongoing analysis process are quoted verbatim below:

Climate Alarmist Claim Fact Checks - May 21, 2021 (See Suppl. #7, Page14.)

"Below are a series of fact checks of the 13 most common climate claims such as those made in the recently released Fourth National Climate Assessment Report. The authors of these reviews are all recognized experts in the relevant fields. For each claim, a summary of the relevant rebuttal is provided below along with a link to the full text of the rebuttal, which includes the names and the credentials of the authors of each rebuttal, all of which is incorporated herein by reference.

Claims the globe has experienced the [warmest ever](#) month or year are totally unsupported by any credible analysis of raw global surface temperature data and its availability. Moreover, the invalidation of Global Average Surface Temperature Data by itself invalidates the EPA 2009 GHG/CO₂ Endangerment Finding as well as the subsequent EPA Findings' claimed link between rising atmospheric CO₂ concentrations and the other climate alarmist claims – which are also independently invalidated below by relevant empirical data. Thus, all such climate alarmist claims are in reality just politically driven fictions.

This rebuttal process has yet to yield a non-falsified claim as shown below: (For updates from 5/21/21, See <http://icecap.us/>)

[Heat Waves](#) - have been decreasing since the 1930s in the U.S. and globally.

[Tornadoes](#) - the number of strong tornadoes has declined over the last half century. More active months occur when unseasonable cold spring patterns are present.

[Hurricanes](#) - the decade just ended as the second quietest for landfalling hurricanes and landfalling major hurricanes in the U.S since the 1850s. 2020 saw a record 30 named storms and many Gulf impacts like the quiet solar periods in the late 1800s and this century, but the ACE index ranked 13th highest. See 2020 Update showing similarities to late 1800s [here](#) and global contrasts [here](#).

[Droughts and Floods](#) - there have been no statistically significant trends.

[Wildfires](#) - decreasing since the very active 1800s. The increase in damage in recent years is due to population growth in vulnerable areas and poor forest management. See Australia Wildfire story [here](#). See this analysis that shows how public lands are ablaze but private lands are not because they are properly managed [here](#).

[Snowfall](#) - has been increasing in the fall and winter in the Northern Hemisphere and North America with many records being set.

[Sea level](#) - the rate of global sea level rise on average has fallen by 40% the last century. Where today, the rate is increasing - local factors such as land subsidence are to blame. See how sea level trends are being adjusted [here](#).

[Arctic, Antarctic and Greenland Ice](#) - the polar ice varies with multidecadal cycles in ocean temperatures. Current levels are comparable to or above historical low levels. Arctic ice returned to higher levels with a very cold winter in 2019/20. Ice was highest level since 2013. See update [here](#) on the AMO, PDO ocean cycles, the Solar and Arctic temperatures.

[Ocean Acidification](#) - when life is considered, ocean acidification (really slightly reduced alkalinity) is a non-problem, or even a benefit.

Carbon Pollution as a [health hazard](#) - carbon dioxide (CO₂) is an odorless invisible trace gas that is plant food and it is essential to life on the planet. CO₂ is not a pollutant. The [EPA reports](#) between 1970 and 2019, the combined emissions of the six common real pollutants (PM2.5 and PM10, SO₂, NO_x, VOCs, CO and Pb) dropped by 77 percent.

Climate change is [endangering food supply](#) - the vitality of global vegetation in both managed and unmanaged ecosystems is better off now than it was a hundred years ago, 50 years ago, or even a mere two-to-three decades ago thanks in part to CO₂.

There is a [97% consensus](#) that climate change is man-made - a 97% consensus is a convenient fiction meant to bypass the scientific method and sway public opinion and drive societal changes and policies that support political agendas.'

OUR CORE CLIMATE SCIENCE TEAM BOTTOM-LINE IS THAT THE CURRENT
SOCIAL COST OF CARBON(SCC) ESTIMATES ARE ALL FATALLY FLAWED
PART V

On December 11, 2023, the Supreme Court refused to examine the numerous science-based arguments contained in a Petition for Reconsideration of EPA's 2009 Green House Gas (GHG) Endangerment Finding. (See:

<https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (called "Suppl. #7") This court ignored the specific scientific arguments contained in the Petition as spelled out to it (basically as per the quoted text below) and simply denied the Petition claiming the petitioners did not have Standing – a well-known tactic to avoid decisions in a highly politically-charged situation.

Unfortunately, this Supreme Court decision denied scrutiny to the **one regulation in the U.S. that is not only the single most economically significant, but also the single most scientifically flawed, of all of the regulations on the Federal books. The timing of the Court's decision is particularly unfortunate in that regulators are just now preparing to use the now proven fatally flawed Social Cost of Carbon (SCC) estimates as key input to the regulatory process.**

In fact, no Court has seen proof of the science argument that, since the Equilibrium Climate Sensitivity (ECS) of CO₂ (associated with doubling CO₂ in the atmosphere) is actually zero, all Climate Models are fundamentally flawed. Therefore, the SCC estimation/modeling systems, which always link such climate models to economic models, are also fundamentally flawed. (See Suppl. #7, quotes below from pages 13 - 14 & 18)

"The TSD (Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, Interagency Working Group on Social Cost of Carbon, United States Government, February 2010), at page 4, gives information on the key assumptions from which the SCC estimates have been derived.

From this document, it is clear that the SCC values that have been derived from this process were critically dependent on a key parameter, the so-called Equilibrium Climate Sensitivity (ECS). For this parameter to be non-zero requires a properly, mathematically validated proof that rising atmospheric CO₂ concentration have had a statistically significant impact on global temperatures.

(See:https://archive.ipcc.ch/publications_and_data/ar4/wg1/en/ch8s8-6-2.html)

However, no scientists have yet devised an empirically validated theory proving that rising atmospheric CO₂ levels have had a statistically significant impact on global temperatures. {See: PART II & III above.}

Hence, for CO₂, the Best Estimate of its ECS is zero. Of course, this will mean that all SCC estimation/modeling systems would have to forecast no economic {cost} impact from continued increases in atmospheric CO₂ concentrations. Thus, current SCC estimation/modeling systems, relying on flawed climate models linked to economic models, are themselves all fundamentally flawed. One cannot reject that SC-CO₂ is {negative implying CO₂ is} a Beneficial gas.

This conclusion must be reached because based on {PARTs II-IV}, there has been no validation of the claims that rising atmospheric CO₂ levels have imposed any costs whatsoever on human health and welfare through any known mechanism and certainly not by causing record setting Global Average Surface Temperatures. In fact, independent of that now disproven mechanism, nothing truly unusual has been going in the Earth's Climate System over the last 100 plus years. The Alarmist's Claims have all been falsified. {See Suppl. #7, Pages 14-18 or PART IV}

So, there are no supposed *higher temperature-driven* costs, but the benefits of rising atmospheric CO₂ levels on plant growth and the reduced costs of feeding the Earth's growing population are clearly enormous. The vitality of global vegetation in both managed and unmanaged ecosystems is better off now than it was a hundred years ago, 50 years ago, or even a mere two-to-three decades ago thanks in part to rising CO₂ levels. For proof see the "Food Supply" {Alarmist Claim in PART IV.}

Thus, CO₂ is a Beneficial Gas having a negative SC-CO₂.

Regarding the Other Trace GHGs (e.g., methane, N₂O, CFCs and HFCs): "The argument here can be made quite simply. First, it has been shown {in Suppl. #7, pages 19-20 & PARTs II -IV} that all of these trace GHGs have ECS = 0. This means that the changes in the concentrations in any or all of these trace gases can be expected to not have a measurable impact on the Earth's surface temperatures. Thus, there is no scientifically justifiable expectation of associated temperature-related costs to society.

Second, all of these trace gases, to the extent they end up in the atmosphere, do so because of processes that clearly provide economic benefits to society or they would not go on. The uses of all of these gases all derive from their value in the competitive marketplace and the benefits from their current use are obvious in the enormous demand for their related products and services. **Thus, the social cost of each Trace GHG other than CO₂ is also negative; therefore, each is also a beneficial gas.**" (See: Suppl; #7, quotes above from pages 19 -22.) **In short, the currently promoted social cost of carbon estimates are not only worthless; they are downright dangerous to put forward. Credible inputs are indispensable for policy makers to correctly analyze U.S. energy, economic and national-security-related issues.**

OUR CORE CLIMATE SCIENCE TEAM'S BOTTOM-LINE RECOMMENDATIONS
BASED ON SCIENCE ARGUMENTS
PART VI

On December 11, 2023, the Supreme Court refused to examine the numerous science-based arguments contained in a Petition for Reconsideration of EPA's 2009 Green House Gas (GHG) Endangerment Finding. (See: <https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (called "Suppl. #7") This court ignored the specific scientific arguments contained in the Petition as spelled out to it (basically, as per the quoted or paraphrased text in PARTs I-V above) and simply denied the Petition claiming the petitioners did not have Standing – a well-known tactic to avoid decisions in a highly politically-charged situation.

Unfortunately, this Supreme Court decision denied scrutiny to the one regulation in the U.S. that is not only the single most economically significant, but also the single most scientifically flawed, of all of the regulations on the Federal books. **The ramifications of this Supreme Court Denial will be enormous if an EPA GHG Endangerment Finding Reconsideration is not initiated very quickly. (See Suppl. #7, Pages 22-23 quoted here.)**

"In short, based on the sum total of the eight validated arguments {See Suppl. #7, Page i.}, the currently contemplated SCC estimates are not only worthless; they are extremely dangerous to put forward to current U.S. energy, economic and national security-related policymakers as credible input to their analyses.

As clearly demonstrated by this body of research findings, climate alarmism has no basis in science. This alarmism is all driven and supported by fabricated temperature data as well as mathematical climate modeling and analytical incompetence. Motives of key scientists and other key players will be left to others to sort out.

Based on the easily reproducible, peer-reviewed and published research cited herein, climate science now finds that there is no mathematically valid proof that past increases in atmospheric GHG concentrations have caused the officially reported global warming over the last 50 years or so. Therefore, there is no proof of any social costs related to such GHG emissions.

In fact, these GHG emissions are beneficial to society no matter what processes by which they might occur. Typically, if the efficiency of the particular process involved can be improved, such GHG emissions will automatically be reduced through action by a competitive marketplace. If not, there is no cost to society in any case.

Finally, on-going fact checks of the 13 most common climate alarmist claims have consistently validated that absolutely nothing unusual is going on with the Earth's climate system {See PART IV}. In the considerable research cited, changes in the Earth's temperature have been shown to be readily explained by natural factors involving solar, volcanic and oceanic/atmospheric activity. {See PART III.}

These findings strongly suggest that America and its allies have already made extremely severe climate policy errors, the negative impacts of which will only grow exponentially. By taking these erroneous climate and energy policy actions, America is rapidly destroying its energy security to the detriment of its economic and national security but to the great benefit of all three of its major enemies: China, Russia and Iran.

This must stop immediately and America must now reverse course quickly – taking the following action:

All efforts by state and federal governments to subsidize in any way the use of any renewable energy sources must be immediately terminated.

All current state and federal as well as private (e.g., financial) sector efforts to inhibit the finding, production and use of all fossil fuels must be immediately terminated.

All U.S. government action and funding at all levels to take steps to regulate the emissions of all GHGs must be immediately terminated – since they are all beneficial gases. Regulation of Criteria Pollutants under the CAA has been very successful and must be continued.

America must stay out of the Paris Agreement and encourage its key allies to get out if they are in it.

This new information on climate science must be widely publicized via every possible credible channel targeting today's relevant audiences, including: key federal and state leadership, financial, fossil fuel and auto sector leadership as well as key media outlets.

The utter lunacy of America's Federal Government leadership continuing to take the unsuspecting American people on this ride over a cliff would certainly seem to be outrageous behavior on the part of those who know, or should know, the facts. Many of these key facts, e.g., the GAST data fabrication, have been provided to high level officials years ago without result. For the sake of all Americans, we pray that recipients of this transmission will behave differently.”

OUR CORE CLIMATE SCIENCE TEAM BOTTOM-LINE ON CLIMATE MODELS
-WHAT IS NOW KNOWN TO BE VIRTUALLY CERTAIN
TECHNICAL APPENDIX I*

- The so-called Climate Models are not useful for policy analysis. There are many reasons, but the most important factor is that the models are based on the assumption that increases in the Trace GHGs (i.e., CO₂, CH₄, N₂O, etc.) have had, and will continue to have, a statistically significant impact on the Earth's temperature. This critical assumption has been proven to be false.
- There are two independent proofs of this falsification: the first proof is the Wallace et al econometric/structural analysis modeling work (See: <https://thsresearch.files.wordpress.com/2021/06/amended-epa-7th-supplement-to-pet.-for-recon.pdf> (See "Suppl. #7"), pages 8 & 20.)
- The totally independent second proof is the van Weingaarden-Happer pure physics modeling work showing why further increases in any or all of the Trace GHG concentrations are highly unlikely to have a statistically significant impact on the Earth's temperatures. (See: <https://doi.org/10.48550/arXiv.2006.03098>.)
- The econometric work provides an actual modelling framework/process that can provide temperature forecasts as a function of the Natural Factors. (see: [EF DATA Comment on Christy et al Paper Final 042818V4](#)). Solar Activity (as measured by Cumulative TSI) is shown to be by far the most important explanatory variable. (Climate Models mistakenly assume solar energy input to the Earth does not change enough to impact temperature forecasts.)
- Moreover, as Dr. John Christy's two paragraphs so eloquently demonstrate (See Suppl.#7, Page 12), the unique value of this econometric/structural analysis approach is that it can handle any heat transfer processes that might actually be dominant on planet Earth over the relevant time period.
- It should immediately come to mind that the Earth has a great deal of ocean water on its surface where the sun's rays impact the surface and do not bounce off. This happens most in the tropics which is over 75% ocean. Moreover, ocean energy transfer is robust, with numerous and persistent ocean conveyor belts always at work.

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- Over half of incoming solar energy, the Infrared portion, can only penetrate and energize the boundary layer (about 4 inches) of the tropical ocean. This energy then leaves this boundary layer primarily by evaporation, carrying enormous amounts of latent heat into the upper troposphere, which in a chaotic fashion warms different geographic areas and altitudes. A portion of the energy also leaves the boundary layer into the deeper ocean by conduction and convection.
- The other two components of solar energy, Visible Light (>40%) and UV (<5%), penetrate beyond the boundary layer into the deeper ocean. However, within the first 10 m (32.8 ft), water absorbs more than 50 percent of the visible light energy. Even in clear tropical water only about 1 percent of visible light—mostly in the blue range—penetrates to 100 m.
- Taken together, these heat transfer processes are so effective that, since 1959, the surface temperature trend in the Tropical Pacific Ocean has been all but flat; and is, in fact, flat if the impact of the 1977 chaotic shift in the ENSO Central Tendency is removed. (See: <https://thsresearch.files.wordpress.com/2017/04/ef-data-research-report-second-editionfinal041717-1.pdf>, pages 38-40.)
- This is the key tropical heat transfer process climate scientists sought to model but got terribly wrong. Moreover, many of the actual processes involved are chaotic, dealing with the atmosphere at all levels, volcanic eruptions, etc. Thus, credible Climate Model forecasts of temperatures and other weather and climate-related parameters such as rainfall, snowfall and sea levels are impossible.
- Like it or not, these are the heat transfer processes that are actually driving changes in both weather and climate variables. Frankly, it is highly unlikely these chaotic processes can ever be modeled other than by using the econometric methods that have been demonstrated to work quite well for structural analyses (e.g., does CO₂ atmospheric concentration impact temperatures?) But much more work needs to be done to determine how well such methods can work for medium-term (e.g. 5-10 year) temperature trend forecasting.
- However, the use of Natural Factor -based pattern recognition models for short term weather forecasting has proven to be quite useful; but is a tedious process. The system's chaotic behavior typically requires three different models per year.
- Finally, scientists still concerned about the impact of further increases in Trace GHGs have a readily available, proven reliable Early Warning System; viz., the econometric methods which have been proven to perform well for that purpose.

VERBATUM CLIMATE TEXT PROVIDED THE SUPREME COURT
APPENDIX II

“It is imperative that the rules of standing not be manipulated to insulate from judicial scrutiny the one regulation that is both the single most economically significant, and also the single most scientifically flawed, of all the regulations on the federal books. The Endangerment Finding that is the subject of the present Petition is the single most economically significant of all the regulations ever issued by the federal government. It forms the entire basis for the current all-of-government avalanche of regulations that supposedly are going to “save the planet” by eliminating the most reliable and cost-effective energy sources from the American way of life. This avalanche of Regulations includes not just the Power Plant Rule and the Vehicle Rule discussed earlier in this Petition, but dozens of more rules and proposed rules and administrative actions of every sort from every corner of the bureaucracy: actions to suppress drilling for oil and gas, actions to block pipelines from getting built, actions to end energy resource extraction on federal lands, actions to eliminate the use of coal entirely, actions to make washing machines and dryers and dishwashers less functional, actions to forbid the purchase of inexpensive lightbulbs, actions to require massive and costly emissions disclosures from all public companies, actions to ban or restrict heating or cooking using natural gas, hundreds of billions of dollars of taxpayer subsidies for energy sources much less cost effective than what we now have, and dozens upon dozens upon dozens of more such costly actions from throughout the government. All of these actions are entirely based on, and have no justification other than, the Endangerment Finding.

To estimate the cost to Americans of the Endangerment Finding in the hundreds of billions of dollars is to understate the matter by at least an order of magnitude, and more likely two to three orders. If forced by the administrative state to proceed to the end, the cost will likely be in the tens of trillions of dollars, and maybe hundreds of trillions. And the American people will be left far, far poorer, and our energy security and national security will be put in grave jeopardy.

And meanwhile the Endangerment Finding on its merits is based on quicksand. The Endangerment Finding is the most economically significant of all federal regulations, but its supposedly sound scientific basis is easily proven to have been built on a house of cards. The 2009 Endangerment Finding, as one of its three lines of evidence, claimed that the Earth had been facing record setting global average surface temperatures. However, such global average surface temperature data have been, and continue to be totally fabricated for a very significant portion of the planet for which there was no surface temperature data whatsoever until relatively recently, all to provide support for global warming claims.

For example, the Southern Hemisphere is 80.9% ocean and prior to the year 2000 there were no credible monthly ocean surface data whatsoever for this massive area. This fact alone means that until 2000, the surface temperature record had no data whatsoever for over 40% ($50\% \times 0.809$) of the planet. But it is even worse than that because for much of the surface temperature record since about 1850, there are virtually no credible data outside of North America and Europe. (See App. 105-106).

EPA claimed in the Endangerment Finding that global temperatures were setting records because of greenhouse gas emissions. But proof that substantial parts of the temperature data are fabricated invalidates this claim. Moreover, the invalidation of these global average surface temperature data has been shown by the Petitioners to invalidate each of the three lines of evidence in EPA's 2009 Endangerment Finding, and all subsequent endangerment findings which rest on the 2009 Finding. (See App. 107-110).

This merits argument was not even rebutted by the EPA; it was simply ignored. Also not rebutted was a separate merits argument proving that, in fact, all greenhouse gases have negative social costs so that they are all really beneficial gases requiring no climate-motivated regulation at all. (See App. 101-103).

Moreover, rising global temperatures, properly measured, are readily explained by changes in solar, volcanic and oceanic/atmospheric activity; that is, changes in natural factors. (See App. 111-118).

Based on the invalidated EPA arguments outlined above, the Biden Administration has mandated enormous changes in key sectors of the American economy. Two examples: EPA's proposed Vehicle Rule requires 67% of new vehicles be battery electric by 2032; and in the electric power sector, its Power Plant Rule would require alternate fuels and very costly carbon capture and sequestration for any coal or gas-fired generation. Moreover, there are many more examples of major energy and economic policy errors driven by EPA's 2009 Endangerment Finding.

While the Endangerment Finding is the root of all this regulation, the root of the Endangerment Finding is *Massachusetts v. EPA*. Having set loose a regulatory wrecking ball on the American economy through the tiniest mousehole in administrative law – the definition of “air pollutant” in 42 U.S.C. § 7602(g) – *Massachusetts v. EPA* should be overturned under the Major Questions Doctrine.

The D.C. Circuit looked at the regulatory tsunami driven by the Endangerment Finding and concluded that the consumers who are the targets of the immense and needless costs are not entitled to judicial review because there is no injury in fact. This is an embarrassment to the American judicial system on a level with *Dred Scott v. Sanford*. This honorable Court has the opportunity to straighten this matter out.”