The Week That Was: 2025 01-04 (January 4, 2025) Brought to You by SEPP (<u>www.SEPP.org</u>) The Science and Environmental Policy Project

Quote of the Week: "... as far as the propositions of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality."— Albert Einstein (1921)

Number of the Week: 30 years and 64 years before

THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Scope: This Week begins with Roy Spencer's report that 2024 was the warmest year in the 46year UAH record of atmospheric temperature trends. Jo Nova presents data showing China is the world's greatest emitter of accumulated CO2 from coal. Discussed is a paper showing that breeding may produce plants that are more efficient in using carbon dioxide for photosynthesis without any increase in fertilizer needs. Roger Pielke describes the imaginative efforts of some groups to attribute severe weather events to CO2. A 2021 paper that changes in global temperatures over millions of years are caused by CO2 is discussed with some of the faults presented. Bjorn Lomborg describes some of the consequences of the false claim that wind and solar produce cheap energy.

The Warmest Year: Roy Spencer reports that 2024 was the warmest year in the 46-year satellite record of lower atmospheric temperature trends reported by the Earth System Science Center at the University of Alabama in Huntsville. The data collection dates back to December 1978. Spencer provides a chart showing a ranking of the years using the annual difference from the average annual temperature for the entire record. 2024 was significantly above the previous warmest year of 2023. 2024 is almost 0.77°C above the mean while 2023 was only 0.43°C. The coldest year was 1985, with the temperature about 0.5°C below the mean. The high temperatures appear to be influenced by El Niños, and the low temperatures by volcanos erupting.

Spencer writes:

"The Version 6.1 global area-averaged temperature trend (January 1979 through December 2024) remains at +0.15 deg/ C/decade $[0.27^{\circ}F]$ (+0.22 C/decade over land, +0.13 C/decade over oceans)."

The full report from the Earth System Science Center is not yet available, thus TWTW is reluctant to speculate on what it may say. Certainly, there are two possible explanations for this warming. One explanation is the string of three El Niños from 2022 on. These put more water vapor into the lower atmosphere resulting in less heat loss to space. The second is a decline in cloud cover. This explanation is discussed in "Recent global temperature surge intensified by record-low planetary albedo" by Helge F. Goessling, et al., published by AAAS Science. The abstract states:

"In 2023, the global mean temperature soared to almost 1.5K above the pre-industrial level, surpassing the previous record by about 0.17K. Previous best-guess estimates of known drivers including anthropogenic warming and the El Niño onset fall short by about 0.2K in explaining the temperature rise. Utilizing satellite and reanalysis data, we identify a record-low planetary albedo as the primary factor bridging this gap. The decline is apparently caused largely by a reduced low-cloud cover in the northern mid-latitudes and tropics, in continuation of a multi-annual trend. Further exploring the low-cloud trend and understanding how much of it is due to internal variability, reduced aerosol concentrations, or a possibly emerging low-cloud feedback will be crucial for assessing the current and expected future warming."

Previous papers have pointed out a warming of the oceans, particularly in the tropics. Since infrared radiation cannot penetrate the ocean surfaces beyond a few millimeters (small fractions of an inch) increasing atmospheric CO2 cannot be an explanation of ocean warming over a few years, but increased sunlight at sea level can. The full Earth System Science Center report should be out shortly. When it is released TWTW will discuss this subject further. See links under Measurement Issues – Atmosphere for the temperature trend report and under Challenging the Orthodoxy for the Goessling paper.

China # 1? China has outstripped the US and the EU in annual carbon dioxide emissions. Thus, environmental organizations emphasize historic emissions rather than current emissions. They ignore that some of the emissions disappear into the environment. According to the annual fluctuation recorded at Mauna Loa and elsewhere part of the annual increase in CO2 is absorbed during the plant growing seasons, particularly in the Northen Hemisphere, there are strong drop-offs in concentrations every spring and summer. From the data it may be possible to estimate the CO2 lost to the environment and subsequently calculate a half-life for CO2 emissions. Much of this loss is going to vegetation. Trees are growing more rapidly than before, and the planet is greening.

Our World in Data gives charts that can be changed by the reader. For example, the Cumulative CO2 emissions by source, World, can be edited by country or region. In the general chart, Coal is the dominant source of CO2, followed by Oil, Gas, Flaring, Cement, and Other.

Jo Nova used these charts to show that by 2023, China has the greatest *cumulative* emissions from coal, mostly since 1950, and these emissions exceed that to the US, the EU, and the UK, separately, even though UK and Western country emissions start in 1750, and by 1950 were remarkably high. Thus, the Western anti-coal movement is punishing developed countries for past "sins" while ignoring developing countries for current "sins." Nova writes:

"The point of this post is to highlight how absurd the situation is. The white guilt for 'climate change' is the point — not the gigatons of CO2. No one really gives a damn about carbon dioxide, or they would be trying to solve 'the China problem' as if life on Earth depended on solving it.

The whole planet and every koala will die, but no one has the time to add up a few sums and start talking about trade embargos, or boycotts, or even writing a strong letter to President Xi..."

Nova also shows that the US exceeds the EU, China, and other countries in total cumulative CO2 emissions. See link under Challenging the Orthodoxy for Nova's calculations and https://gml.noaa.gov/ccgg/trends/ for trends in atmospheric CO2 at Mauna Loa.

Benefits of Increasing CO2: As mentioned in the last TWTW, Paul Homewood linked to an article describing a new study. According to the article:

The growth of maize [corn], sugarcane and sorghum has been greatly boosted by modifying the plants to take advantage of higher carbon dioxide levels now found in the air.

This was done by simply increasing the activity of two genes, says Coralie Salesse-Smith at the University of Illinois. The finding should lead to the creation of new varieties whose yields go up as CO2 levels continue to rise.

This is significant because the plants are C4 plants which evolved during an atmospheric low in CO2, and use an enzyme called PEP to fix carbon dioxide into a four-carbon molecule called malate. C4 plants have smaller microscopic pores on the surface of their leaves (called stomata) to reduce water loss than earlier C3 plants that evolved when the atmosphere was far richer in CO2 than today. *Realizing Increased Photosynthetic Efficiency (RIPE) posted an essay describing the difference between C3 and C4 plants*. It begins:

"Photosynthesis is the process that plants use to turn light, carbon dioxide, and water into sugars that fuel plant growth, using the primary photosynthetic enzyme Rubisco.

The majority of plant species on Earth uses C3 photosynthesis, in which the first carbon compound produced contains three carbon atoms. In this process, carbon dioxide enters a plant through its stomata (microscopic pores on plant leaves), where amidst a series of complex reactions, the enzyme Rubisco fixes carbon into sugar through the Calvin-Benson cycle. However, two key restrictions slow down photosynthesis.

- 1. Rubisco aims to fix carbon dioxide, but can also fix oxygen molecules, which creates a toxic two-carbon compound. Rubisco fixes oxygen about 20 percent of the time, initiating a process called photorespiration that recycles the toxic compound. Photorespiration costs the plant energy it could have used to photosynthesize.
- 2. When stomata are open to let carbon dioxide in, they also let water vapor out, leaving C3 plants at a disadvantage in drought and high-temperature environments.

However, plants have evolved another form of photosynthesis to help reduce these losses in hot, dry environments. In C4 photosynthesis, where a four-carbon compound is produced, a unique leaf anatomy allows carbon dioxide to concentrate in 'bundle sheath' cells around Rubisco. This structure delivers carbon dioxide straight to Rubisco, effectively removing its contact with oxygen and the need for photorespiration. What's more, this adaptation allows plants to retain water through the ability to continue fixing carbon while stomata are closed.

C4 plants—including maize, sugarcane, and sorghum—avoid photorespiration by using another enzyme called PEP during the first step of carbon fixation. This step takes place in the mesophyll cells that are located close to the stomata where carbon dioxide and oxygen enter the plant. PEP is more attracted to carbon dioxide molecules and is, therefore, much less likely to react with oxygen molecules. PEP fixes carbon dioxide into a four-carbon molecule, called malate, which is transported to the deeper bundle sheath cells that contain Rubisco. The malate is then broken down into a compound that is recycled back into PEP and carbon dioxide that Rubisco fixes into sugars—without having to deal with the oxygen molecules that are abundant in the mesophyll cells."

RIPE is working on ways to increase efficiency in photosynthesis in C3 crops but improvements in efficiency of C4 plants are also welcome.

The paper at issue is "Increasing Rubisco as a simple means to enhance photosynthesis and productivity now without lowering nitrogen use efficiency" published by the New Phytologist. The summary states:

"Global demand for food may rise by 60% mid-century. A central challenge is to meet this need using less land in a changing climate. Nearly all crop carbon is assimilated through Rubisco, which is catalytically slow, reactive with oxygen, and a major component of leaf nitrogen. Developing more efficient forms of Rubisco, or engineering CO2 concentrating mechanisms into C3 crops to competitively repress oxygenation, are major endeavors, which could hugely increase photosynthetic productivity ($\geq 60\%$). New technologies are bringing this closer, but improvements remain in the discovery phase and have not been reduced to practice. A simpler shorter-term strategy that could fill this time gap, but with smaller productivity increases (c. 10%) is to increase leaf Rubisco content. This has been demonstrated in initial field trials, improving the productivity of C3 and C4 crops. Combining three-dimensional leaf canopies with metabolic models infers that a 20% increase in Rubisco increases canopy photosynthesis by 14% in sugarcane (C4) and 9% in soybean (C3). This is consistent with observed productivity increases in rice, maize, sorghum, and sugarcane. Upregulation of Rubisco is calculated not to require more nitrogen per unit yield and although achieved transgenically to date, might be achieved using gene editing to produce transgene-free gain of function mutations or using breeding."

TWTW comment: Rubisco is an enzyme, a molecule produced by the plant to act as a biological catalyst to speed up specific chemical reactions without being consumed by them. The human body is thought to have about 75,000 different enzymes, generally proteins. Plants have hundreds to thousands of different enzymes depending on the species. Rubisco is the one critical for photosynthesis.

The paper in the New Phytologist discusses the hope that the new pathway of changing the efficiency of Rubisco will not be subject to the regulatory delays faced by bioengineering plants. It then discusses how Rubisco limits both C3 and C4 photosynthesis and the improvements in

CO2 uptake shown in both C3 soybean and C4 sugarcane plants. With proper breeding, improvements in Rubisco may not require increased nitrogen fertilizer. (Nitrogen fertilizer releases Nitrous Oxide, a greenhouse gas that is greatly overrated in its warming potential by the UN IPCC and its collaborators.) The stated conclusions and future perspectives of the paper are (references given in the paper):

"Given the strong limitation that Rubisco imposes on maximum photosynthetic rates in both C3 and C4 crops, it has been and will remain a key target for improvement. As highlighted above, new approaches and tools will accelerate improvement in this key and essential endeavor. However, in terms of technology readiness, both improvement of Rubisco kinetics and introduction of CCMs [CO2-Concentrating Mechanisms] into crops remain in the discovery phase, Technology Readiness Level (TRL) 1 and 2 as defined (USDA-NIFA, 2018). Since most improvements here are transgenic, and necessarily so with CCMs, these would require lengthy deregulation under current legislation, suggesting a 20–30 yr time window until these improvements could enter seed systems in volume. Given the major limitation that Rubisco imposes on yield potential, and the large increases in yield per unit land area needed to reach projected future demand, it is critical that these endeavors are accelerated and realized. While a less sophisticated solution, we have shown here that simply increasing Rubisco content can readily be achieved and is able to increase yield, serving as a shorter-term solution to overcoming the limitations imposed by this central enzyme. It has been reduced to practice in single-site field trials of both a C3 and a C4 crop (TRL4), making it ready for wider scale testing (TRL 5) and entry into seed systems on a shorter timescale. Timescales would be further reduced by achieving upregulation through scarless edited mutation of the Rubisco promoter or 5'UTR regions. Finally, we have shown a 20% increase in Rubisco content would not lower crop nitrogen use efficiency and could substantially increase yield per unit land area, making this one potential solution in decreasing pressure to expand the agricultural footprint to meet rise in demand. Further, this approach would be equally applicable to bioenergy and bioproduct feedstocks that can be grown on marginal land unsuitable for food crops, in particular sustainable perennials such as C4 Miscanthus and switchgrass or fast-growing woody coppice crops such as willows and poplars (Sannigrahi et al., 2010; Somerville et al., 2010; Baker et al., 2022; He et al., 2024). Increasing Rubisco provides a means to achieve a moderate increase in photosynthesis and yield in the short term. It is thus not an alternative to the much-needed larger increases required in the medium and longer term by improving Rubisco kinetics, introducing CCMs and other synthetic opportunities to increase photosynthesis and productivity in crops."

This is promising news because based on geological evidence, the world will get colder, even if it is not the onset of a new Ice Age, and the growing seasons of Earth great grain belts will get shorter. Real famine from climate change (cooling) is likely, though no one knows when. Any increase in plant productivity is welcome. No doubt, many so-called environmental groups will object, as usual, whether valid or not, to any promising improvements for humanity.

See links to Social Benefits of Carbon Dioxide (extensive references in the link to the paper) and <u>https://ripe.illinois.edu/blog/difference-between-c3-and-c4-plants</u> for the RIPE project description of the difference between C3 and C4 plants.

Attributing Weather Events to CO2 Increase: A long-time effort by World Weather Attribution and similar groups is blaming severe weather events on CO2 increases. CO2 is a trace gas, only about 420 parts per million in volume today, and is secondary in its effect to water vapor. Without water vapor and the greenhouse effect, the land masses of Earth would get too cold at night to support life. But that fact is not considered by the UN IPCC and its collaborators, particularly those attributing severe weather events to a slight warming that CO2 may cause.

At one time, World Weather Attribution claimed it derived its attributions from the frequency statistics forming the Gauss-Markov theorem. Ross McKitrick, 2022 co-recipient of SEPP's Fredrick Seitz Award, demonstrated that the authors of a key paper supporting this type of attribution misunderstood the conditions of the Gauss-Markov theorem. Thus, World Weather Attribution, and similar groups are using other tricks to make dubious claims.

Roger Pielke Jr is posting a series on Weather Attribution Alchemy on his blog. As he states, "hurricanes are a poster child of climate politics." The first two parts were "Weather Attribution Alchemy" and "Attribution Stealth Advocacy at the NAS." The current installment is "Tricks of the Trade." In it Pilke describes Attribution Inflation, Begging the Question (assuming the conclusion that is to be proven), and Ignoring Evidence (a common characteristics with all those involved with the UN IPCC and its collaborators). Pielke provides examples of all these tricks and concludes with:

"What is Going on Here?

Extreme event attribution is puzzling.

The most charitable explanation for the proliferation of dodgy attribution claims is that there is a demand for them, including by many in the media and on the climate beat. That demand will be filled by someone — even if the "science" is more like pseudo-science.

A less charitable explanation is that there is a systematic effort underway to contest and undermine actual climate science, including the assessments of the IPCC, in order to present a picture of reality that is simply false in support of climate advocacy. We might call that pseudoscientific gaslighting.

The issues I document above are fairly obvious — *and I invite contrary views, which I am happy to publish here at THB.* "[The Honest Broker]

It is sad to see entities in once distinguished academic institutions reduced to such tricks. World Weather Attribution is in the Grantham Institute at Imperial College London. It has clearly stated that its purpose is to alarm the public about the imagined dangers of increasing CO2. This is clearly political, not scientific nor promoting knowledge. But as Pielke states, these tricks extend to other academic institutions as well, such as MIT. See link under Challenging the Orthodoxy.

Omitting Key Facts: The Annual Review of Earth and Planetary Sciences, 2021, published a paper by James W.B. Rae, *et al.* "Atmospheric CO2 over the Past 66 Million Years from Marine Archives." The paper builds on the paper by Westerhold *et al.* (2020) paper "An astronomically

dated record of Earth's climate and its predictability over the last 66 million years." It is the data record of the Westerhold paper that Willis Eschenbach unraveled, revealing periods of millions of years when temperatures were roughly stable, but CO2 varied from roughly one-half of what it is today to over twice of what it is today. Geoscientist Tom Gallagher took the work by Eschenbach and clearly showed that changes in ocean currents, forced by plate tectonics, better explain changes in Earth's historic climate than changes in CO2. All too typically, the Rae paper ignores plate tectonics and changes in ocean currents.

Other deficiencies in the Rae paper include omitting the work of John Tyndall who demonstrated experimentally that water vapor is the dominant greenhouse gas and carbon dioxide is only secondary. Further, the Rae paper cites Arrhenius S. (1896) "On the influence of carbonic acid in the air upon the temperature of the ground." Arrhenius grossly misunderstood the work of Tyndall and admitted it in a 1906 paper significantly reducing his views of the influence of CO2 on temperatures. The Rae paper omits this self-correction.

Of course, the Rae paper makes no mention of the work of van Wijngaarden and Happer on atmospheric radiation transfer, which explains how greenhouse gases work, using the most up to date database on Earth's atmosphere. See links under Challenging the Orthodoxy – Radiation Transfer for the work of van Wijngaarden and Happer and Defending the Orthodoxy for the work of Rae, *et al.* including its citations.

Unknown Costs: Consumers in Germany and the UK are painfully discovering that the promise of free, clean energy is false. In his essay in the Wall Street Journal, Bjorn Lomborg writes:

"As nations use more and more supposedly cheap solar and wind power, a strange thing happens: Our power bills get more expensive. This exposes the environmentalist lie that renewables have already outmatched fossil fuels and that the 'green transition' is irreversible even under a second Trump administration.

The claim that green energy is cheaper relies on bogus math that measures the cost of electricity only when the sun is shining, and the wind is blowing. Modern societies need around-the-clock power, requiring backup, often powered by fossil fuels. That means we're paying for two power systems: renewables and backup. Moreover, as fossil fuels are used less, those power sources need to earn their capital costs back in fewer hours, leading to even more expensive power.

This means the real energy costs of solar, and wind are far higher than what green campaigners claim. One study shows that in China the real cost of solar power on average is twice as high as that of coal. Similarly, a peer-reviewed study of Germany and Texas shows that solar and wind are many times more expensive than fossil fuels. Germany, the U.K., Spain, and Denmark, all of which increasingly rely on solar and wind power, have some of the world's most expensive electricity.

The International Energy Agency's latest data (from 2022) on solar and wind power generation costs and consumption across nearly 70 countries shows a clear correlation between more solar and wind and higher average household and industry energy prices. In a country with little or no solar and wind, the average electricity cost is about 12 cents a kilowatt-hour (in today's money).

For every 10% increase in solar and wind share, the electricity cost increases by more than 5 cents a kilowatt-hour. This isn't an outlier; these results are substantially similar to 2019, before the effects of the pandemic and the war in Ukraine."

Lomborg shows a chart comparing electricity prices with the percentage of electricity from wind and solar. Then he states:

"Take Germany, where electricity costs 30 cents a kilowatt-hour—more than twice the U.S. cost and more than three times the Chinese price. Germany has installed so much solar and wind that, on sunny and windy days, renewable energy satisfies close to 70% of Germany's needs—a fact the press eagerly reports. But the press hardly mentions dark and still days when these renewables deliver almost nothing. Twice in the past two months, when it was cloudy and nearly windless, solar and wind delivered less than 4% of the daily power Germany needed.

Current battery technology is insufficient. Germany's entire battery storage runs out in about 20 minutes. That leaves more than 23 hours of energy powered mostly by fossil fuels. Last month, with cloudy skies and nearly no wind, Germany faced the highest power prices since the energy crisis caused by Russia's invasion of Ukraine in 2022, with wholesale prices reaching a staggering \$1 a kilowatt-hour."

Lomborg explains how poor countries are especially hurt by the deceit that green energy is cheap. then concludes with:

"This sets the backdrop for U.S. authorities' recent bribery allegations against Indian billionaire Gautam Adani. Since most Indian states don't want to 'risk 'intermittent' renewables, 'according to Reuters, he allegedly had to bribe government officials to get them to buy power from his \$6 billion solar power project. Mr. Adani's case confirms what the data already show: Solar and wind are bad business and make our power much more expensive."

See Article # 1. ***********

Number of the Week: 30 years and 64 years before. The UK Met Office has drastically lowered its once world-class standards. In recent years, independent UK researchers have been discovering that the Met Office has been reporting temperatures from locations that are only Class 4 or 5 (such as "close to other sources of heat" such as runways and taxiways in busy airports). Others have revealed that some weather stations do not exist, such as the reported location on an urban beach.

Chris Morrison in the Daily Sceptic reports"

"The U.K. Met Office claims to have a continuous record of temperatures at Stornoway Airport going back to 1873. This is truly remarkable since manned powered flight was not achieved until 1903 and the actual airport was built in 1937." The airport record began 30 years before the first powered, controlled flight with a person on board occurred and 64 years before the airport was built. See link under Communicating Better to the Public – Make things up.

NEWS YOU CAN USE:

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2013 <u>https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf</u> *Summary*: <u>https://www.heartland.org/_template-assets/documents/CCR/CCR-II/Summary-for-</u>

Policymakers.pdf

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014 http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019 http://climatechangereconsidered.org/climate-change-reconsidered-ii-fossil-fuels/

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus By Craig D. Idso, Robert M. Carter, and S. Fred Singer, Nongovernmental International Panel on Climate Change (NIPCC), Nov 23, 2015 http://climatechangereconsidered.org/why-scientists-disagree-about-global-warming/

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008 http://www.sepp.org/publications/nipcc_final.pdf

Challenging the Orthodoxy – Radiation Transfer

The Role of Greenhouse Gases in Energy Transfer in the Earth's Atmosphere By W.A. van Wijngaarden and W. Happer, Preprint, Mar 3, 2023 <u>https://co2coalition.org/wp-content/uploads/2023/11/The-Role-of-Greenhouse-Gases-in-Energy-</u> Transfer-in-the-Earths-Atmosphere.pdf

Dependence of Earth's Thermal Radiation on Five Most Abundant Greenhouse Gases By W.A. van Wijngaarden and W. Happer, Preprint, December 22, 2020 <u>https://wvanwijngaarden.info.yorku.ca/files/2020/12/WThermal-Radiationf.pdf?x45936</u>

Challenging the Orthodoxy Tricks of the Trade Weather Attribution Alchemy, Part 3

By Roger Pielke Jr., His Blog, Dec 30, 2024 https://rogerpielkejr.substack.com/p/tricks-of-the-trade?utm_source=post-emailtitle&publication_id=119454&post_id=153778942&utm_campaign=email-posttitle&isFreemail=true&r=f7h7&triedRedirect=true&utm_medium=email

Decline of Reflective Low Clouds May Have Contributed to Recent Record Heat

A new study links decreasing cloud cover over the ocean to last year's spiking heat, adding to research showing Earth's loss of luster [decrease in Earth's Albedo, reflection of solar enengy back to space] is increasing warming.

By Bob Berwyn, Inside Climate News, Dec 5, 2024

https://insideclimatenews.org/news/05122024/reflective-low-clouds-decline-may-contribute-to-record-heat/?utm_source=InsideClimate+News&utm_campaign=d9ec21b6da-

<u>EMAIL_CAMPAIGN_2024_12_07_02_12&utm_medium=email&utm_term=0_29c928ffb5-d9ec21b6da-328641316</u>

Link to paper: **Recent global temperature surge intensified by record-low planetary albedo** By Helge F. Goessling, Thomas Rackow and Thomas Jung, AAAS Science, Dec 5, 2024 <u>https://www.science.org/doi/10.1126/science.adq7280</u>

Since the industrial revolution China has burnt more coal than any nation on Earth By Jo Nova, Her Blog, Dec 31, 2024

https://joannenova.com.au/2024/12/since-the-industrial-revolution-china-has-burnt-more-coalthan-any-nation-on-earth/

Defending the Orthodoxy

Ancient Deepsea Shells Reveal 66 Million Years Of Carbon Dioxide Levels

Co-authored by two Texas A&M scientists, a new analysis using ancient marine organisms provides important past climate data and context to modern carbon emissions.

By Leslie Lee, Texas A&M University College of GeosciencesJune 14, 2021

https://today.tamu.edu/2021/06/14/ancient-deepsea-shells-reveal-66-million-years-of-carbondioxide-

levels/#:~:text=Samples%20were%20taken%20from%20cores%20of%20mud,chemical%20fing erprints%20of%20past%20changes%20in%20CO2.

Link to paper: Atmospheric CO2 over the Past 66 Million Years from Marine Archives By James W.B. Rae, et al., Annual Review of Earth and Planetary Sciences, 2021

https://www.annualreviews.org/content/journals/10.1146/annurev-earth-082420-063026

[SEPP Comment: Not mentioned in the historical review is the work of John Tyndall 1859-1875 who used experiments to demonstrate the greenhouse effect, and that water vapor is the dominant greenhouse gas.]

NASA, NOAA to Announce 2024 Global Temperatures, Climate Conditions

Press Release by Abbey Donaldson, NASA Headquarters, Jan 3, 2025 [H/t William Readdy] <u>https://www.nasa.gov/news-release/nasa-noaa-to-announce-2024-global-temperatures-climate-conditions/</u>

[SEPP Comment: Begins with a globe red and orange stating: "This map depicts global temperature anomalies for meteorological summer in 2024 (June, July, and August). It shows

how much warmer or cooler different regions of Earth were compared to the baseline average from 1951 to 1980. (Credit: NASA/NOAA)" Apparently, NASA/NOAA ignore that we are in Icehouse Earth.]

Defending the Orthodoxy – Bandwagon Science

Can State Lawfare Contain the Fictional Methane Crisis?

By Eric Worrall, WUWT, Jan 1, 2025

https://wattsupwiththat.com/2025/01/01/can-state-lawfare-contain-the-fictional-methane-crisis/

Link to: Methane leaks are supercharging the climate crisis — here's what we must do, now By Russel Honore, The Hill, Dec 31, 2024

https://thehill.com/opinion/energy-environment/5060288-methane-emissions-climate-change/

From the article: Lt. Gen. Russel L. Honoré (Ret.) is a former commanding officer of the U.S. First Army. He led Joint Task Force Katrina in New Orleans following the devastating Category 5 hurricane. He is currently head of The Green Army, an organization dedicated to finding solutions to pollution.

[SEPP Comment: Katarina was a class 3 hurricane at landfall, not class 5; when it made landfall at the Louisiana / Mississippi line. The mayor of New Orleans failed to order evacuation of the City, which flooded when flood control dikes failed from shoddy construction resulting in many deaths. Eventually, the mayor went to jail for diverting Federal funds intended for flood control to political uses, part of a long, sad history of New Orleans. During the Vietnam failure, the military command did not understand its enemy, a severe military failure. The Green Army does not understand its enemy, methane is insignificant in global warming / climate change.]

UN's new mission: 'Fight the climate-related disinformation running rampant on social media' – 'Debunk myths & put an end to the narratives of denialism' – 'Global Initiative for Information Integrity on Climate Change'

By Marc Morano, Climate Depot, Jan 1, 2025

https://www.climatedepot.com/2025/01/01/uns-new-mission-fight-the-climate-relateddisinformation-running-rampant-on-social-media-debunk-myths-put-an-end-to-the-narratives-ofdenialism-global-initiative-for-information-int/

Link to: UN Global Initiative for Information Integrity on Climate Change

Press Release, UN Climate Action, Accessed Jan 2, 2025

https://www.un.org/climatechange/information-integrity

Link to: United Nations Global Principles For Information Integrity

Press Release, UN, Accessed Jan 2, 205

https://www.un.org/en/information-integrity/global-principles

PDF: <u>https://www.un.org/sites/un2.un.org/files/un-global-principles-for-information-integrity-en.pdf</u>

The principles are societal trust and resilience; independent, free and pluralistic media; transparency and research; public empowerment; and healthy incentives. They all share at their core an unwavering commitment to human rights.

Questioning the Orthodoxy

The 2050 Net Zero Climate Scam By William Levin, American Thinker, Dec 29, 2024

https://www.americanthinker.com/articles/2024/12/the 2050 net zero climate scam.html

It needs to be said as loudly as possible. The 1.5-degree climate tipping limit has no basis in any finding of the IPCC. It is the arbitrary finding of 195 political actors, in defense of the non-scientific "well below 2 degree" catastrophe, magically transported by the IPCC from 2100 to 2050.

The errors and misstatements in "Climate Denialism"

By Andy May, WUWT, Jan 1, 2025 <u>https://wattsupwiththat.com/2025/01/01/the-errors-and-misstatements-in-climate-denialism/</u> Link to erroneous paper: **Climate Denialism** By Tinus Pulles, The American Journal of Economics and Sociology, Dec 31, 2024 https://onlinelibrary.wiley.com/doi/10.1111/ajes.12611

Climate News - January 2025

By Alan Moran, His Blog, Jan 1, 2025 https://regulationeconomics.com/so/a5PGAO4oy?languageTag=en&cid=8760f05f-93da-4631a061-9acbe88a819c

African Desertification

By Tony Heller, His Blog, Dec 31, 2024 https://realclimatescience.com/2024/12/african-desertification/#gsc.tab=0

"Comparison of archival and recent photographs shows a marked increase in Namib Desert vegetation over the past 90 years of CO? increase, while regional climate models predict increased aridification with climate change."

After Paris!

Brazil's Paris Pledge Lies In Tatters

By Paul Homewood, Not a Lot of People Know That, Jan 1, 2025 <u>https://notalotofpeopleknowthat.wordpress.com/2025/01/01/brazils-paris-pledge-lies-in-tatters/</u> Yet the delusional Miliband [UK Secretary of State for Energy Security and Net Zero] still believes that the rest of the world will follow our lead and wreck their own economies as well!

Mexico's Emissions Con Trick

By Paul Homewood, Not a Lot of People Know That, Jan 2, 2025 <u>https://notalotofpeopleknowthat.wordpress.com/2025/01/02/mexicos-emissions-con-trick/</u> Link to: Climate Action Tractor, Country Summary, Mexico By Staff, Climate Analytics, NewClimate Institute, et al., December 12, 2022 <u>https://climateactiontracker.org/countries/mexico/</u> From Tracker: Mexico's climate policies continue to go backwards, as fossil fuel use is prioritized and alimete related policies and institutions diamentlad. Mexico's undeted 2020 to

prioritized and climate-related policies and institutions dismantled. Mexico's updated 2030 target (NDC), submitted in November 2022 results in higher emission levels than the targets from 2016, breaching both agreements under the Paris Agreement and Mexican Law – where governments committed to improve their targets over time.

'Trump effect' undermines U.N. climate summit

COP29's failure is great news for humanity By Marc Morano, The Washington Times, Dec 24, 2024 [H/t ICECAP] https://www.washingtontimes.com/news/2024/dec/24/trump-effect-undermines-u-n-climatesummit/

Social Benefits of Carbon Dioxide

Genetic tweak to three key crops massively boosts their growth

By Paul Homewood, Not a Lot of People Know That, Dec 26, 2024

https://notalotofpeopleknowthat.wordpress.com/2024/12/22/genetic-tweak-to-three-key-crops-massively-boosts-their-growth/

Link to simple explanation: **Genetic tweak to three key crops massively boosts their growth** A simple change to maize, sorghum and sugarcane that allows them to take advantage of rising CO2 levels can boost their growth by around a fifth

By Michael Le Page, New Scientist, Dec 19, 2024 [Paywalled]

https://www.newscientist.com/article/2460964-genetic-tweak-to-three-key-crops-massively-boosts-their-growth/"

Link to paper: Increasing Rubisco as a simple means to enhance photosynthesis and productivity now without lowering nitrogen use efficiency

By Coralie E. Salesse-Smith, Yu Wang, and Stephen P. Long, New Phytologist, Dec 17, 2024 https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.20298

New Year's Resolution to Embrace CO2 Emissions and Benefits

By Vijay Jayaraj, CO2 Coalition, Dec 30, 2024 https://co2coalition.org/2024/12/30/new-years-resolution-to-embrace-co2-emissions-andbenefits/

Scientists Report A 'Striking Global Greening Trend' Over The Last 42 Years

By Kenneth Richard, No Tricks Zone, Dec 30, 2024 <u>https://notrickszone.com/2024/12/30/scientists-report-a-striking-global-greening-trend-over-the-last-42-years/</u>

Link to paper: Uncovering true significant trends in global greening

By Oliver Gutiérrez-Hernández and Luis V. García, Remote Sensing Applications: Society and Environment, January 2025

https://www.sciencedirect.com/science/article/pii/S2352938524002416

Problems in the Orthodoxy

Global Coal Consumption Continues To Rise As Multi-Trillion Dollar Green Energy Plans Falter

By P Gosselin, No Tricks Zone, Dec 29, 2024

https://notrickszone.com/2024/12/29/global-coal-consumption-continues-to-rise-as-multi-trillion-dollar-green-energy-plan-falters/

Climate Cartel Frays: Goldman Sachs Exits Global Green Banking Alliance

By Bonner Russell Cohen, Real Clear Energy, Dec 30, 2024 https://www.realclearenergy.org/articles/2024/12/30/climate_cartel_frays_goldman_sachs_exits_ global_green_banking_alliance_1081596.html

Seeking a Common Ground

Lightfoot and Ratzer, a Response: Why an Equation of State Alone Cannot Model Atmospheric Dynamics

By Kevin Kilty, Retired Mechanical Engineering faculty member, University of Wyoming, CO2 Coalition, Dec 30, 2024

https://co2coalition.org/publications/lightfoot-and-ratzer-a-response-why-an-equation-of-statealone-cannot-model-atmospheric-dynamics/

[SEPP Comment: Disagrees with Lightfoot/Ratzer stating that the influence of water vapor is 1,000 to 7,000 times that of CO2.]

Science, Policy, and Evidence

Germany's New Morgenthau Plan

By Victor Davis Hanson, the Daily Signal, Jan 3, 2025

https://www.dailysignal.com/2025/01/03/germanys-new-morgenthau-

plan/?utm_source=TDS_Email&utm_medium=email&utm_campaign=MorningBell&mkt_tok= ODI0LU1IVC0zMDQAAAGX0AGk5AXYgU3L3my_MU4yJ5SfuRXMHfLJSODnJdfe6BhMF KJIexhsr_spGpHXkrCsLgsQkJkCcKoC_V6I7OQHHKzVXV9ZF8xr7uiljfz1-UuNtNk

[SEPP Comment: The classical scholar reminds us of the inhumane plan for postwar Germany. Fortunately, President Truman recognized its nature, and his administration implemented the Marshall Plan, which promoted the economic growth of Europe for general welfare.]

Model Issues

Claim: Artificial Intelligence can Improve Climate Models

By Eric Worrall, WUWT, Dec 31, 2024

https://wattsupwiththat.com/2024/12/31/claim-artificial-intelligence-can-improve-climate-models/

Worrall: If you have a possible missing variable problem, the solution is to add more arbitrary adjustments to your model?

Lacking Data, Climate Models Rely on Guesses

By Ron Clutz, His Blog, Jan 3, 2025

https://rclutz.com/2025/01/03/lacking-data-climate-models-rely-on-guesses/

[SEPP Comment: Discussed Lorenz's butterfly effect -- uncertainty. In statistics, degrees of freedom state the number of values that vary freely. Generally, the greater the degrees of freedom, the greater the uncertainty in the final calculation.]

Measurement Issues -- Atmosphere

UAH v6.1 Global Temperature Update for December 2024: +0.62 deg. C By Roy Spencer, His Blog, Jan 3, 2025 https://www.drroyspencer.com/2025/01/uah-v6-1-global-temperature-update-for-december-2024-

0-62-deg-c/

Ocean Leads Cooling UAH December 2024 By Ron Clutz, His Blog, Jan 3, 2025 https://rclutz.com/2025/01/03/ocean-leads-cooling-uah-december-2024/

Changing Weather

Hurricane Data For 2024

By Paul Homewood, Not a Lot of People Know That, Jan 1, 2025 https://notalotofpeopleknowthat.wordpress.com/2025/01/01/hurricane-data-for-2024/ Link to: Global Historical Tropical Cyclone Statistics By Staff, Tropical Meteorology Project, CSU, Accessed Jan 3, 2025 https://tropical.atmos.colostate.edu/Realtime/index.php?arch&loc=global [SEPP Comment: No long-term trends.]

U.S. Water Woes – Southwest

By Kip Hansen, WUWT, Dec 28, 2024

https://wattsupwiththat.com/2024/12/29/u-s-water-woes-southwest/

[SEPP Comment: Adequate water for population growth in the Great Basin and the Southwest is a significant problem with few alternatives. However, coastal areas have the viable alternative of inexpensive desalination thanks to technical breakthroughs in filtration of algae in seawater, primarily by Israel.]

Don't Panic! It's Only Winter!

By Paul Homewood, Not a Lot of People Know That, Jan 3, 2025 <u>https://notalotofpeopleknowthat.wordpress.com/2025/01/03/dont-panic-its-only-winter/</u> I wonder how we managed to cope in the past!!!!

Recent Temperature Falls Likely to Put a Dampener on 'Hottest Year Evah' Stories

By Chris Morrison, The Daily Sceptic, Dec 28, 2024 [H/t Paul Homewood] https://dailysceptic.org/2024/12/28/recent-temperature-falls-likely-to-put-a-dampener-on-hottestyear-evah-stories/

Changing Climate

Central Greenland Was Recently Ice-Free And Covered With Plants When CO2 Was Under 300 ppm

By Kenneth Richard, No Tricks Zone, Jan 3, 2025

https://notrickszone.com/2025/01/03/central-greenland-was-recently-ice-free-and-covered-with-plants-when-co2-was-under-300-ppm/

Link to paper: Plant, insect, and fungi fossils under the center of Greenland's ice sheet are evidence of ice-free times

By Paul R. Bierman, et al., PNAS, Accepted June 17, 2024 https://www.pnas.org/doi/pdf/10.1073/pnas.2407465121

From the abstract: To understand better the history of Greenland's ice, we analyzed glacial till collected in 1993 from below 3 km of ice at Summit, Greenland. The till contains plant fragments, wood, insect parts, fungi, and cosmogenic nuclides showing that the bed of the GrIS [Greenland Ice Sheet] at Summit is a long-lived, stable land surface preserving a record of deposition, exposure, and interglacial ecosystems. Knowing that central Greenland was tundra-covered during the Pleistocene informs the understanding of Arctic biosphere response to deglaciation.

[SEPP Comment: According to Google Earth, Summit Camp is at 72°34'North, 38°27'West and has an elevation of 10533 feet (3210 meters). It is about one-third the way north from the southern tip of Greenland.]

NOAA & Global Cooling In The 1970s

By Paul Homewood, Not a Lot of People Know That, Jan 3, 2025

https://notalotofpeopleknowthat.wordpress.com/2025/01/03/noaa-global-cooling-in-the-1970s/ [SEPP Comment: When changing climate was cooling it created real fears, not imaginary ones from a warming climate.]

Changing Earth

'Mystery volcano' that erupted and cooled Earth in 1831 has finally been identified By Mindy Weisberger, CNN, Jan 3, 2025

https://www.accuweather.com/en/weather-news/mystery-volcano-that-erupted-and-cooled-earthin-1831-has-finally-been-identified/1729581

Link to paper: The 1831 CE mystery eruption identified as Zavaritskii caldera, Simushir Island (Kurils)

By William Hutchison, et al., PNAS, Dec 30, 2024

https://www.pnas.org/doi/10.1073/pnas.2416699122

The eruption was one of the most powerful of the 19th century, spewing so much sulfur dioxide into the stratosphere that annual average temperatures in the Northern Hemisphere dropped by about one 1 degree Celsius (1.8 degrees Fahrenheit). The event took place during the last gasp of the Little Ice Age, one of the coldest periods on Earth in the past 10,000 years. [Boldface added] [SEPP Comment: CNN stating the Little Ice Age took place? Did the UN IPCC censors approve?]

Agriculture Issues & Fear of Famine

Modern Scientific Controversies: The War on Food: Part 1

By Kip Hansen, WUWT, Jan 3, 2024

https://wattsupwiththat.com/2025/01/03/modern-scientific-controversies-the-war-on-food-part-1/ [SEPP Comment: Strangely, those who falsely claim science supports dangerous global warming often object to using science to improve food production.]

Telegraph Cereal Harvest Lies

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2024 <u>https://notalotofpeopleknowthat.wordpress.com/2024/12/30/telegraph-cereal-harvest-lies/</u> Homewood to the reporter: And the chart of cereal output is proof that cereal output has been extremely stable since the 1980s, despite occasional blips. Your scaremongering about climate change is baseless.

Lowering Standards

Put 'science' back in the National Science Foundation

By Charlton Allen, American Thinker, Dec 28, 2024 [H/t John Dunn] https://www.americanthinker.com/blog/2024/12/put science back in the national science fou

ndation.html

But under the Biden-Harris administration, the NSF seems to have forgotten that "science" is its middle name. According to a recent Senate report, the NSF has diverted more than \$2 billion into Diversity, Equity, and Inclusion (DEI) programs, making ideological conformity a higher priority than scientific merit.

Wrong, World Meteorological Organization, There Is No Evidence "Climate Change Impacts Grip[ed] Globe in 2024"

By Anthony Watts, Climate Realism, Jan 3, 2025 https://climaterealism.com/2025/01/wrong-world-meteorological-organization-there-is-noevidence-climate-change-impacts-griped-globe-in-2024/

BBC Extreme Weather Complaint

By Paul Homewood, Not a Lot of People Know That, Jan 2, 2025 <u>https://notalotofpeopleknowthat.wordpress.com/2025/01/02/bbc-extreme-weather-complaint/</u> I have now submitted a complaint to the BBC about their report, "A year of extreme weather that challenged billions".

Communicating Better to the Public – Use Yellow (Green) Journalism?

5 wins for the climate in 2024 By Sharon Udasin, The Hill, Dec 31, 2024 <u>https://thehill.com/policy/energy-environment/5051470-2024-climate-bright-spots/</u> 1. Coal use is plummeting in US and around the world [SEPP Comment: Are China and India part of the world?]

Climate change brought extreme weather, heat in 2024: UN

By Robin Millard, Geneva (AFP) Dec 30, 2024 https://www.terradaily.com/reports/Climate_change_brought_extreme_weather_heat_in_2024_U N_999.html

Number of cyclones not increasing, but intensity is, data shows

By AFP Staff Writers, Paris (AFP) Dec 31, 2024 https://www.terradaily.com/reports/Number_of_cyclones_not_increasing_but_intensity_is_data_ shows_999.html

"If one can assume climate change is responsible for these trends, make no mistake, the humanitarian catastrophes generated by cyclones are largely due to poverty, vulnerability and a lack of protection for the affected populations," Robert Vautard, a climatologist and top IPCC official, told AFP.

[SEPP Comment: No links to databases or the database agencies claimed. Named tropical cyclones have been increasing because storms are recognized even if they occur far from land.]

Communicating Better to the Public – Exaggerate, or be Vague?

UK Government's Torchwood Institute ARIA to Provide Early Warning of the End of the World

By Eric Worrall, WUWT, Dec 30, 2024

https://wattsupwiththat.com/2024/12/30/uk-governments-

t%cc%b50%cc%b5r%cc%b5c%cc%b5h%cc%b5w%cc%b50%cc%b50%cc%b5d%cc%b5-%cc%b5i%cc%b5n%cc%b5t%cc%b5i%cc%b5t%cc%b5t%cc%b5t%cc%b5t%cc%b5t%cc%b5e-aria-toprovide-early-warning-of-the-end-of-the-world/

Link to: About ARIA

By Staff, ARIA, Accessed, Jan 2, 2025

https://www.aria.org.uk/about-aria/

From climate change to AI, society faces challenges and opportunities that can be uniquely addressed by science + technology.

Who we are

Created by an Act of Parliament, and sponsored by the Department for Science, Innovation, and Technology, ARIA funds breakthrough R&D in underexplored areas to catalyse new paths to prosperity for the UK and the world

[SEPP Comment: Do they understand physical science, how we know things, and its limits?]

Communicating Better to the Public – Make things up.

Met Office Claims to Have Been Recording Temperatures at "Stornoway Airport" 30 Years Before Aeroplanes Were Invented

By Chris Morrison, The Daily Sceptic, Dec 31, 2024 https://dailysceptic.org/2024/12/31/met-office-claims-to-have-been-recording-temperatures-atstornoway-airport-30-years-before-aeroplanes-were-invented/

Communicating Better to the Public – Use Propaganda

BBC Extreme Weather Lies Exposed

By Paul Homewood, Not a Lot of People Know That, Jan 1, 2025 <u>https://notalotofpeopleknowthat.wordpress.com/2025/01/01/bbc-extreme-weather-lies-exposed/</u> Actual facts are of no interest whatsoever to the BBC now, as far as climate is concerned. They live in their own little bubble, where fraudulent computer models reinforce their ideology.

Communicating Better to the Public – Use Propaganda on Children

Climate Anxiety: Manufactured Hysteria Masquerading as Science

By Charles Rotter, WUWT, Dec 30, 2024

https://wattsupwiththat.com/2024/12/30/climate-anxiety-manufactured-hysteria-masqueradingas-science/

Link to paper: Climate emotions, thoughts, and plans among US adolescents and young adults: a cross-sectional descriptive survey and analysis by political party identification and self-reported exposure to severe weather events

By R Eric Lewandowski, et al., Lancet, November 2024

https://www.thelancet.com/action/showPdf?pii=S2542-5196%2824%2900229-8

From paper: Interpretation Climate change is causing widespread distress among US youth and affecting their beliefs and plans for the future. These effects may intensify, across the political spectrum, as exposure to climate-related severe weather events increases.

[SEPP Comment: Confusing fact (actual climate change) with associated propaganda.]

Expanding the Orthodoxy

Climate change will devastate value of homes, warns Bank of England

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2024

https://notalotofpeopleknowthat.wordpress.com/2024/12/30/climate-change-will-devastate-value-of-homes-warns-bank-of-england/

Homewood: Surely the Bank should be more concerned about the economic catastrophe coming our way thanks to Net Zero?

Questioning European Green

From The Director Of Net Zero Watch

By Francis Menton, Manhattan Contrarian, Dec 29, 2024

https://www.manhattancontrarian.com/blog/2024-12-29-from-the-director-of-net-zero-watch Link to: **The beginning of the end**

By Andrew Montford, Net Zero Watch, Dec 23, 2024

https://www.netzerowatch.com/campaigns/view-

email/YaMpOGBpr65q6auTlSohFXcfXbKUq9PxwGxhYMw56oVTHM7Tkb4Z2ENGCwvRPix gu4BdRsEe5WA7aaKajnMlOx6Lc3XGCAUjLDvj2IN4W9MDmZRR16xFdQx9saigev51Ge07 YcJKp9Lly2AjxS94hdCyAZoYWrKS8wBmTQ==?ss_campaign_id=6769548d03229b10cfacae 6b&ss_campaign_name=NZW%20Samizdat%3A%20The%20beginning%20of%20the%20end &ss_campaign_sent_date=2024-12-

23T13%3A42%3A31Z&ss_email_id=676968c05bb4417f556ae2b2&ss_source=sscampaigns

From Montford: There is a long road still to travel, and we shouldn't expect the entrenched climate cult to suddenly collapse. Instead, we would expect the Net Zero timescales to be extended – see the story about the Canadian government below – and then, over the years, the targets themselves to be watered down, and then ignored, if not cancelled entirely.

Europe: The Fall of the Holy Renewable Empire

by Drieu Godefridi, Gatestone Institute, Dec 27, 2024 [H/t Bernie Kepshire] https://www.gatestoneinstitute.org/21244/europe-germany-renewable-energy

Most Expensive In Europe ... Growing Speech Tyranny

2025 Looks Bleak For Germany...Energy The Most Expensive In Europe ...Growing Speech Tyranny

By P Gosselin, No Tricks Zone, Jan 1, 2025

https://notrickszone.com/2025/01/01/2025-looks-bleak-for-germany-energy-the-most-expensivein-europe-growing-speech-tyranny/

Effective today, Germany's CO2 surcharge will rise from 45 euros a tonne to 55 euros, which will further fan inflation and social discontent.

Questioning Green Elsewhere

The Green Revolution: How CO2 Is Saving the Planet, Not Destroying It By Willow Tohi, Natural News • Dec. 30, 2024 https://thelibertydaily.com/green-revolution-how-co2-is-saving-planet-not/

Funding Issues

It's a win: Bankers are backing away from the Monster Banking Climate Cartel By Jo Nova, Her Blog, Jan 2, 2025 https://joannenova.com.au/2025/01/bankers-quietly-exit-from-the-global-climate-cartel/

Litigation Issues

US Supremes Hear Climate Lawfare Case to Stop Oil Railway By Ron Clutz, His Blog, Jan 4, 2025 https://rclutz.com/2025/01/04/us-supremes-hear-climate-lawfare-case-to-stop-oil-railway/ [SEPP Comment: Following the 2024 Loper-Bright v. Raimondo decision ending the Chevron Deference, and the 2022 West Virginia v. EPA decision limiting the ability for agencies to expand their powers without specific laws passed by Congress, the decision in the new case, Seven County Infrastructure Coalition v. Eagle County, Colorado. may be important in limiting government agencies from freely interpreting the law under NEPA, the National Environmental Policy Act,]

Cap-and-Trade and Carbon Taxes

Hochul's senseless \$75B climate cash grab will only speed New York's decline By Peter Murphy, New York Post, Dec 30, 2024

https://nypost.com/2024/12/30/opinion/hochuls-75b-climate-cash-grab-only-speeds-nys-decline/ [SEPP Comment: Another absurd result of EPA's political declaration that carbon dioxide is a pollutant, which is contradicted by physical evidence.]

RGGI Investment Proceed Performance in New York

By Roger Caiazza, WUWT, Dec 30, 2024

https://wattsupwiththat.com/2024/12/30/rggi-investment-proceed-performance-in-new-york/ Cap-and-invest programs like RGGI are frequently touted as a program that will kill two birds with one stone. "It simultaneously puts a limit on the tons of pollution companies can emit — 'cap' — while making them pay for each ton, funding projects to help move the jurisdiction away from polluting energy sources — 'invest."

Subsidies and Mandates Forever

Net Zero Watch condemns new windfarm rip-off

Press Release, Net Zero Watch, Jan 3, 2025

https://www.netzerowatch.com/all-news/nzw-condemns-new-windfarm-ripoff

Link to report: Discarded wind energy increases by 91% in 2024

By Staff, Renewable Energy Foundation, Jan 2, 2025

https://ref.org.uk/ref-blog/384-discarded-wind-energy-increases-by-91-in-2024

Nearly £400 million was paid to windfarms in 2024, and much more than this in indirect costs. [SEPP Comment: Paying unreliable generation to turn off when it may crash the grid?]

Stop Out-the-Door Grants and Loans, DOE!

By Robert Bradley Jr, Letter, Master Resource, Dec 30, 2024 <u>https://www.masterresource.org/u-s-department-of-energy/stop-these-loans/</u> Since the election, the LPO has been finalizing loans at an exponentially higher rate than that of the rest of the current administration's tenure. *[SEPP Comment: The LPO is the Department of Energy's Loan Programs Office.]*

EPA and other Regulators on the March

EPA determines formaldehyde poses an 'unreasonable risk' to humans and must be regulated By Rachel Frazin, The Hill, Jan 3, 2025

https://thehill.com/policy/energy-environment/5066408-epa-formaldehyde-unreasonable-risk/

[SEPP Comment: Each day the human body produces about 1.5 ounces (43 grams) of formaldehyde by its normal metabolic processes. Then, we have the formaldehyde in fruits and vegetables. Will all these be regulated by the EPA?] https://www.americanchemistry.com/chemistry-in-america/chemistries/formaldehyde

Energy Issues – Non-US

DESNZ tacitly concede defeat

By Andrew Montford, Net Zero Watch, Jan 2, 2025

https://www.netzerowatch.com/all-news/desnz-tacitly-concede-defeat

[SEPP Comment: The Department for Energy Security and Net Zero uses estimates of capital costs, operating costs, and capacity factors that are far too high. Is it another example of government incompetence or government corruption?]

The Climate and Nature Bill

By Paul Homewood, Not a Lot of People Know That, Dec 31, 2024

https://notalotofpeopleknowthat.wordpress.com/2024/12/31/the-climate-and-nature-bill/

How, for instance, will we be able to build the factories needed without access to cement (too carbon intensive) or steel? And where will we get the machinery to fill them with, given that we cannot import it and do not have the manufacturing capacity ourselves? Then there are all of the diggers, bulldozers, dumper trucks and other construction equipment needed, all running on diesel.

We would also need the appropriate expertise and skilled labour, which we probably don't have now.

Perhaps the biggest irony is that Ed Miliband would not be able to import solar panels from China, or components for his beloved wind farms.

It is crazy, but also frightening, that 192 MPs actually plan to vote for this Bill.

Energy Issues – Australia

Will Australia's Mandatory Climate Reporting make Greenwashing Illegal? By Eric Worrall, WUWT, Jan 1, 2025

https://wattsupwiththat.com/2025/01/01/will-australias-mandatory-climate-reporting-make-greenwashing-illegal/

Energy Issues -- US

Clean Energy Benchmark Is Natural Gas: Today and for the Future

By Staff, The Empowerment Alliance, Dec 30, 2024

https://www.realclearenergy.org/articles/2024/12/30/clean_energy_benchmark_is_natural_gas_to_day_and_for_the_future_1081352.html

New York On The March To Climate Utopia

By Franics Menton, Manhattan Contrarian, Jan 2, 2025

https://www.manhattancontrarian.com/blog/2025-1-2-new-york-on-the-march-to-climate-utopia The first serious deadline arrives in 2030, where the official mandate is 70% of electricity generation from "renewables" (aka "70 x 30"). That deadline is now just five years away. Within the past year, all the efforts to move toward the 70 x 30 goal are falling apart, as anybody who had given the subject any critical thought knew that they inevitably would. But nobody in authority has yet been willing to acknowledge that this has turned into a farce.

New York Response to Part 490 Sea-Level Rise Amendment Comments

By Roger Caiazza, WUWT, Jan 3, 2025

https://wattsupwiththat.com/2025/01/03/new-york-response-to-part-490-sea-level-rise-amendment-comments/

Surprising no one, their Assessment of Public Comments blew off our concerns. There is no reasonable defense for using RCP-8.5. As long as New York State continues to claim they follow the science but ignore it when it is inconvenient, the more likely the rush to the bottom will become a death spiral.

Power restored to almost all of Puerto Rico after massive blackout

By Rachel Frazin, The Hill, Jan 2, 2024

https://thehill.com/policy/energy-environment/5063261-puerto-rico-power-restored-afterblackout/

[SEPP Comment: LUMA energy is privately owned and took over Puerto Rico's grid in 2021. As of 2022, power plant generation was 63% petroleum, 23% natural gas, and 8% coal.]

Georgia Proves It: Stable Electricity Markets Attract Business and Growth

By Kevin Doyle, Real Clear Energy, Jan 2, 2025

https://www.realclearenergy.org/articles/2025/01/02/georgia_proves_it_stable_electricity_market s_attract_business_growth_1082180.html

A big ingredient in this success is Georgia's utility regulation structure and the advantages it affords Georgians, especially when compared to deregulated states in the Northeast. In contrast, the deregulated energy markets in states like New York, New Jersey, and Massachusetts usually face higher rates plus price volatility and reliability issues that are a big part of the equation guiding where businesses locate operations—especially large industrial consumers.

[SEPP Comment: The comparison is false. New York, New Jersey and Massachusetts heavily regulate electricity generation. The have banned nuclear and new hydropower and severely limit natural gas generation.]

Washington's Control of Energy

Outgoing Biden Interior Department announces flurry of new wilderness protections By Zack Budryk, The Hill, Dec 30, 2024

https://thehill.com/policy/energy-environment/5059879-biden-admin-proposes-environmental-protections/

The Ruby Mountains Gambit: Sabotaging America's Energy Future for Political Games By Charles Rotter, WUWT, Dec 31, 2024

https://wattsupwiththat.com/2024/12/31/the-ruby-mountains-gambit-sabotaging-americasenergy-future-for-political-games/ See link immediately above.

Oil and Natural Gas – the Future or the Past?

This Year in Gas

A look back at the most interesting energy market of 2024. By Doomberg, Dec 30, 2024 <u>https://newsletter.doomberg.com/p/this-year-in-gas?utm_source=post-email-title&publication_id=343139&post_id=153718873&utm_campaign=email-post-title&isFreemail=true&r=f7h7&triedRedirect=true&utm_medium=email</u>

Return of King Coal?

India Keeps Coal Power at Full Throttle By Julianne Geiger, Oil Price.com, Dec 27, 2024 https://oilprice.com/Energy/Coal/India-Keeps-Coal-Power-at-Full-Throttle.html

Coal Will Power Kazakhstan into a Nuclear Future

By Vijay Jayaraj, CO2 Coalition, Jan 2, 2025 https://co2coalition.org/2025/01/02/coal-will-power-kazakhstan-into-a-nuclear-future/

Nuclear Energy and Fears

Another eXcellent Post from Chris Martz Comment, WUWT, Dec 31, 2024 <u>https://wattsupwiththat.com/2024/12/31/another-banger-x-post-from-chris-martz/</u> [SEPP Comment: Land requirements for nuclear compared with those for solar and wind but not including the storage needed for these unreliable sources.]

Virginia Officials Say State Will Be Home to World's First Fusion Power Plant

By Darrell Proctor, Power Mag, 2024 <u>https://www.powermag.com/virginia-officials-say-state-will-be-home-to-worlds-first-fusion-power-plant/?utm_source=omeda&utm_medium=email&utm_campaign=pwrnews+eletter&oly_enc_id =7809H6412578J0B</u>

Alternative, Green ("Clean") Solar and Wind

Regulators Approve Largest Solar Project in Wisconsin History By Darrell Proctor, Power Mag, Dec 15, 2024 https://www.powermag.com/regulators-approve-largest-solar-project-in-wisconsinhistory/?utm_source=omeda&utm_medium=email&utm_campaign=pwrnews+eletter&oly_enc_i d=7809H6412578J0B [SEPP Comment: Build more in an area with low solar potential.]

Texas Coal Plant Will Convert to Solar Plus Storage with Help of Fed Funding By Aaron Larson, Power Mag, Dec 30, 2024

https://www.powermag.com/texas-coal-plant-will-convert-to-solar-plus-storage-with-help-of-fed-

funding/?utm_source=omeda&utm_medium=email&utm_campaign=pwrnews+eletter&oly_enc_id=7809H6412578J0B

San Miguel Electric Cooperative Inc. (SMECI), a not-for-profit generation and transmission rural electric cooperative located in Atascosa County, Texas, was awarded more than \$1.4 billion

through the U.S. Department of Agriculture's (USDA's) Empowering Rural America (New ERA) program. With the money, SMECI, which operates a mine-mouth lignite-fired power plant, said it will convert its lignite operations to a 400-MW solar and 200-MW battery storage facility "to provide clean, reliable, and affordable renewable energy to 47 rural South Texas counties." The USDA said it expects to make additional New ERA award announcements in the coming weeks. Including the December investments, the USDA has awarded funding to 15 cooperatives as part of the New ERA program, totaling almost \$9 billion in New ERA-financed grants and loans.

[SEPP Comment: Big time money for part time power.]

Habitat destruction offsets for "renewables" are just indulgences

By David Wojick, CFACT, Dec 27, 2024 https://www.cfact.org/2024/12/27/habitat-destruction-offsets-for-renewables-are-justindulgences/

Preservationists nationwide say that wind energy is harming America's historic sites

A pyramid in Wyoming, lighthouses in New England, and the site where Japanese-Americans were incarcerated in World War II are some of the historic sites that are being threatened by wind development, preservationists say.

By Kevin Killough, Just The News, Dec 26, 2024

https://justthenews.com/politics-policy/energy/preservationists-across-country-say-wind-energyharming-americas-historic

Alternative, Green ("Clean") Energy -- Other

Biden administration adds exemptions into new climate rules for hydrogen energy By Rachel Frazin, Jan 3, 2025

https://thehill.com/policy/energy-environment/5064545-biden-administration-climate-ruleshydrogen/

The tax credits are seen as an important piece of the Biden administration's climate agenda since hydrogen power could be an important tool to lower carbon emissions from industries like aviation, steel and cement — whose emissions are particularly difficult to eliminate. *[SEPP Comment: What form of energy is used to create the free hydrogen?]*

Alternative, Green ("Clean") Vehicles

EV Mandates vs. Freedom | Mark P. Mills Video posted by Charles Rotter, WUWT, Dec 28, 2024 https://wattsupwiththat.com/2024/12/28/ev-mandates-vs-freedom-mark-p-mills/

Over The Sea To Arran-Emissions and All!!

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2024 https://notalotofpeopleknowthat.wordpress.com/2024/12/30/over-the-sea-to-arran-emissionsand-all/

Similar post: **The Glen Sannox Clown Show** By Paul Homewood, Not a Lot of People Know That, Dec 30, 2024 https://notalotofpeopleknowthat.wordpress.com/2024/12/30/the-glen-sannox-clown-show/ The carbon footprint of a long-delayed new "green" ferry will be far larger than the 31-year-old diesel ship that usually serves the route between the Scottish mainland and the island of Arran.

The Real Definition of EV Range Anxiety

By Geoffrey Pohanka, Real Clear Energy, Dec 31, 2024

https://www.realclearenergy.org/articles/2024/12/31/the_real_definition_of_ev_range_anxiety_1 081730.html

[SEPP Comment: Not discussed is charging time, which can take an hour or more.]

California Dreaming

International Regulatory Authority Says California Grid At Risk of Energy Shortfalls By Kenneth Schrupp, Climate Realism, Dec 27, 2024

https://climaterealism.com/2024/12/international-regulatory-authority-says-california-grid-at-risk-of-energy-shortfalls/

(The Center Square) – An international regulatory authority issued a warning that California's energy grid is at risk of energy shortfalls in 2029, noting increased electrification of buildings and transportation is driving high energy demand growth as reliable, baseline power from natural gas is replaced with less reliable solar energy.

According to the California Public Utilities Commission, which oversees the state's utilities, PGE has raised energy prices by 127% between January 2014 and 2024.

With PGE rates now at 40 cents per kilowatt hour, they will soon hit the 50 cent per kilowatt hour break-even point when it costs more to drive a Tesla Model 3 with electrons than it does to drive a Toyota Camry with gasoline.

California snowpack near average in season's first survey, though officials caution 'anything can happen'

By Sharon Udasin, The Hill, Jan 2, 2025 https://thehill.com/homenews/state-watch/5064159-california-snowpack-survey/

BELOW THE BOTTOM LINE

Climate Alarmists Push AMOC Collapse AND Greenland Ice Collapse By Eric Worrall, WUWT, Dec 28, 2024 <u>https://wattsupwiththat.com/2024/12/28/climate-alarmists-push-amoc-collapse-and-greenlandice-collapse/</u> Two for the price of one? The weather will be record cold with melting ice.

Iran Unplugged

The Islamic country's electric grid, gas sector, and currency, are all collapsing. Is the theocratic regime next? By Robert Bryce, His Blog, Dec 29, 2024

https://robertbryce.substack.com/p/iran-unplugged?utm_source=post-emailtitle&publication_id=630873&post_id=153690990&utm_campaign=email-posttitle&isFreemail=true&r=f7h7&triedRedirect=true&utm_medium=email

Great communist successes: Cuba the "sugar bowl of the world" now has to import sugar By Jo Nova, Her Blog, Dec 28, 2024

https://joannenova.com.au/2024/12/great-communist-successes-cuba-the-sugar-bowl-of-theworld-now-has-to-import-sugar/

Link to primary news article: The government describes it as "shameful" that Cuba has to import sugar

Production has fallen, impacting the domestic market and exports. A pound of sugar costs 600 pesos.

By the Editorial Team of CiberCuba, Dec 19, 2024

https://en.cibercuba.com/noticias/2024-12-19-u1-e199894-s27061-nid294157-gobierno-calificavergonzoso-cuba-tenga-importar#google_vignette

[SEPP Comment: Other sources such as Reuters and BBC also report the massive decline in production.]

The stupid nation: The UK Gov wants to "de-Westernize" science

By Jo Nova, Her Blog, Jan 3, 2025

https://joannenova.com.au/2025/01/uk-gov-wants-to-de-westernize-science-because-we-dont-have-enough-division-and-racist-education/

Climate change tricking UK seasons-BBC

By Paul Homewood, Not a Lot of People Know That, Dec 29, 2024 <u>https://notalotofpeopleknowthat.wordpress.com/2024/12/29/climate-change-tricking-uk-seasons-bbc/</u>

Since the dawn of civilization mankind has celebrated the end of winter and the onset of spring. Only the BBC could turn it into some sort of calamity!

I Had A Dream

Guest Post By Patrick Fossett, Not a Lot of People Know That, Dec 31, 2024 <u>https://notalotofpeopleknowthat.wordpress.com/2024/12/31/i-had-a-dream/</u>[SEPP Comment: A pollutant by another name is not a pollutant?

Thing Of The Past Update

By Tony Heller, His Blog, Jan 1, 2025

https://realclimatescience.com/2025/01/thing-of-the-past-update-2/#gsc.tab=0

Twenty-five years after the end of snow was announced, snow is forecast for at least 48 states and all of the UK and Ireland.

ARTICLES

1. Green Electricity Costs a Bundle

The data make clear: The notion that solar and wind power save money is an environmentalist lie.

By Bjorn Lomborg, WSJ, Jan. 1, 2025

https://www.wsj.com/opinion/green-electricity-costs-a-bundle-wind-solar-data-analysis-powerprices-259344f4?mod=hp_opin_pos_5#cxrecs_s TWTW Summary: Substantially covered in the This Week section above.